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 600
 cgcttcaaag atctcaacct tgctggaaca gcggaggtgg ggcttgacag ctacttcag
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 737

<210> 3310

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3310

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			20					25					30		
Ala	Gln	Leu	Glu	Glu	Gln	Phe	Tyr	Leu	Gln	Ala	Leu	Lys	Leu	Pro	Asn
			35					40				45			
Gln	Thr	His	Pro	Asp	Val	Pro	Val	Gly	Asp	Glu	Ser	Gln	Ala	Arg	Val
	50					55				60					
Leu	His	Met	Val	Gly	Asp	Lys	Pro	Val	Phe	Ser	Phe	Gln	Pro	Arg	Gly
65					70					75				80	
His	Leu	Glu	Ile	Gly	Glu	Lys	Leu	Asp	Ile	Ile	Arg	Gln	Lys	Arg	Leu
			85						90					95	
Ser	His	Val	Ser	Gly	His	Arg	Ser	Tyr	Tyr	Leu	Arg	Gly	Ala	Gly	Ala
			100					105					110		
Leu	Leu	Gln	His	Gly	Leu	Val	Asn	Phe	Thr	Phe	Asn	Lys	Leu	Leu	Arg
		115					120					125			
Arg	Gly	Phe	Thr	Pro	Met	Thr	Val	Pro	Asp	Leu	Leu	Arg	Gly	Ala	Val
	130						135				140				
Phe	Glu	Gly	Cys	Gly	Met	Thr	Pro	Asn	Ala	Asn	Pro	Ser	Gln	Ile	Tyr
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			165						170					175	
Glu	Val	Gly	Leu	Ala	Gly	Tyr	Phe	Met	Asp	His	Thr	Val	Ala	Phe	Arg
			180					185					190		
Asp	Leu	Pro	Val	Arg	Met	Val	Cys	Ser	Ser	Thr	Cys	Tyr	Arg	Ala	Glu
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Thr	Asn														
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<210> 3311

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3311

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 120
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 360
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 486

<210> 3312

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3312

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Ala	Glu	Gly	Gly	Tyr	Gln	Arg	Tyr	Gly	Val	Arg	Ser	Tyr	Leu	His	Gln
		20						25					30		
Phe	Tyr	Glu	Asp	Cys	Thr	Ala	Ser	Ile	Trp	Glu	Tyr	Glu	Asp	Asp	Phe
		35					40					45			
Gln	Ile	Gln	Arg	Ser	Pro	Asn	Arg	Trp	Ser	Ser	Val	Phe	Trp	Lys	Val
	50					55					60				
Gly	Leu	Ile	Ser	Gly	Thr	Val	Phe	Val	Ile	Leu	Gly	Leu	Thr	Val	Leu
65					70					75				80	
Ala	Val	Gly	Phe	Leu	Val	Pro	Pro	Lys	Ile	Glu	Ala	Phe	Gly	Glu	Ala
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Asp	Phe	Val	Val	Val	Asp										
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<210> 3313

<211> 1791

<212> DNA

<213> Homo sapiens

<400> 3313

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 120
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 180
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 240
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 300

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360
gaatgtgtga catttgctgc agatgaaccc gtgtacattg ctggccaaca ggcttttttc
420
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480
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540
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600
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660
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720
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1380
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1791

<210> 3314

<211> 537

<212> PRT

<213> Homo sapiens

<400> 3314

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 Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly
 35 40 45
 Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His
 50 55 60
 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
 65 70 75 80
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
 85 90 95
 Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
 100 105 110
 Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp
 115 120 125
 Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr
 130 135 140
 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
 145 150 155 160
 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
 165 170 175
 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
 180 185 190
 Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu
 195 200 205
 Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp
 210 215 220
 Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr
 225 230 235 240
 Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys
 245 250 255
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
 260 265 270
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
 275 280 285
 His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg
 290 295 300
 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
 305 310 315 320
 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
 325 330 335
 Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
 340 345 350
 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
 355 360 365
 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
 370 375 380
 Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
 385 390 395 400
 Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

405 410 415
 Asp Gly Thr Ser Ser Tyr Lys Asp Phe Ala Met Ser Lys Asn Asn Arg
 420 425 430
 Phe Thr Ser Ala Gly Gln Ala Ser Lys Asn Ile Ile Gln Pro Pro Ser
 435 440 445
 Cys Val Leu His Tyr Tyr Asn Val Pro Leu Cys Val Thr Glu Glu Thr
 450 455 460
 Phe Thr Lys Leu Cys Asn Asp His Glu Val Leu Thr Phe Ile Lys Tyr
 465 470 475 480
 Lys Val Phe Asp Ala Lys Pro Ser Ala Lys Thr Leu Ser Gly Leu Leu
 485 490 495
 Glu Trp Glu Cys Lys Thr Asp Ala Val Glu Ala Leu Thr Ala Leu Asn
 500 505 510
 His Tyr Gln Ile Arg Val Pro Asn Gly Ser Asn Pro Tyr Thr Leu Lys
 515 520 525
 Leu Cys Phe Ser Thr Ser Ser His Leu
 530 535

<210> 3315

<211> 934

<212> DNA

<213> Homo sapiens

<400> 3315

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 120
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 180
 aaaacatccc tgagttcacc accttgggcca gaagttgttc tgccagaccc agttgaggag
 240
 accagacacc atgcagaggt cgtgaagaag gtgaatgaga tgatcgtcac ggggcagtat
 300
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 360
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 420
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 480
 cttgttcgag tagaagccac agtcattgaa aagacagaat catggccaag aatcattatg
 540
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 660
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 720
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 780
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 840
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 900

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934

<210> 3316

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3316

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Ser	Ile	His	Arg	Ala	Leu	His	Ile	Tyr	Gln	Gly	Asn	Ile	Lys	Ile	Tyr
			20					25					30		
Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro	Glu	Val	Val	Leu
		35					40					45			
Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu	Val	Val	Lys	Lys
	50					55				60					
Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg	Leu	Phe	Ala	Val
65				70						75				80	
Val	His	Phe	Ala	Ser	Arg	Gln	Trp	Lys	Val	Thr	Ser	Glu	Asp	Leu	Ile
			85					90					95		
Leu	Ile	Gly	Asn	Glu	Leu	Asp	Leu	Ala	Cys	Gly	Glu	Arg	Ile	Arg	Leu
			100					105					110		
Glu	Lys	Val	Leu	Leu	Val	Gly	Ala	Asp	Asn	Phe	Thr	Leu	Leu	Gly	Lys
		115				120						125			
Pro	Leu	Leu	Gly	Lys	Asp	Leu	Val	Arg	Val	Glu	Ala	Thr	Val	Ile	Glu
	130					135				140					
Lys	Thr	Glu	Ser	Trp	Pro	Arg	Ile	Ile	Met	Arg	Phe	Arg	Lys	Arg	Lys
145					150					155				160	
Asn	Phe	Lys	Lys	Lys	Arg	Ile	Val	Thr	Thr	Pro	Gln	Thr	Val	Leu	Arg
			165					170					175		
Ile	Asn	Ser	Ile	Glu	Ile	Ala	Pro	Cys	Leu	Leu					
			180					185							

<210> 3317

<211> 1665

<212> DNA

<213> Homo sapiens

<400> 3317

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120
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180
caagtgtac gttatgaagc tgccaaatta agaacactga gcaaatgtaa ttctcccgtg
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300
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360
ctgggggaga tggaggcgaa gacaagagag ctcatgcta gaagaaccac acctcttttg
420

gaatatatta aaaatagaaa attagaaaag cagagaattc gagaagagaa gcgagaagaa
 480
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 660
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 720
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 780
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<210> 3318

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3318

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			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu	

35	40	45
Arg Glu Glu Glu Lys Arg Arg Arg Arg Glu Glu Glu Arg Cys Lys Lys		
50	55	60
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile		
65	70	75
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu		
100	105	110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
130	135	140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
145	150	155
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		
165	170	175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
180	185	190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys		
225	230	235
Lys Asn Val Ser Gly Cys Leu Lys Val Gln Ala Ala Cys		
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<210> 3319

<211> 1541

<212> DNA

<213> Homo sapiens

<400> 3319

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120
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<210> 3320

<211> 256

<212> PRT

<213> Homo sapiens.

<400> 3320

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		20					25						30		
Glu	Tyr	Val	Arg	Trp	Met	Met	Tyr	Trp	Ile	Val	Phe	Ala	Leu	Phe	Met
		35					40					45			
Ala	Ala	Glu	Ile	Val	Thr	Asp	Ile	Phe	Ile	Ser	Trp	Phe	Pro	Phe	Tyr
		50				55					60				
Tyr	Glu	Ile	Lys	Met	Ala	Phe	Val	Leu	Trp	Leu	Leu	Ser	Pro	Tyr	Thr
		65			70				75					80	
Lys	Gly	Ala	Ser	Leu	Leu	Tyr	Arg	Lys	Phe	Val	His	Pro	Ser	Leu	Ser
			85				90						95		
Arg	His	Glu	Lys	Glu	Ile	Asp	Ala	Tyr	Ile	Val	Gln	Ala	Lys	Glu	Arg
			100				105						110		
Ser	Tyr	Glu	Thr	Val	Leu	Ser	Phe	Gly	Lys	Arg	Gly	Leu	Asn	Ile	Ala

115	120	125
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130	135	140
Gly Arg Leu Arg Ser Phe Ser Met Gln Asp Leu Arg Ser Ile Ser Asp		
145	150	155
Ala Pro Ala Pro Ala Tyr His Asp Pro Leu Tyr Leu Glu Asp Gln Val		
165	170	175
Ser His Arg Arg Pro Pro Ile Gly Tyr Arg Ala Gly Gly Leu Gln Asp		
180	185	190
Ser Asp Thr Glu Asp Glu Cys Trp Ser Asp Thr Glu Ala Val Pro Arg		
195	200	205
Ala Pro Ala Arg Pro Arg Glu Lys Pro Leu Ile Arg Ser Gln Ser Leu		
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Arg Val Val Lys Arg Lys Pro Pro Val Arg Glu Gly Thr Ser Arg Ser		
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Leu Lys Val Arg Thr Arg Lys Lys Thr Val Pro Ser Asp Val Asp Ser		
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<210> 3321

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 3321

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<210> 3322

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3322

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Thr	Pro	Thr	Ser	Val	Ile	Gln	Val	Thr	Asn	Leu	Ser	Ser	Ala	Val	Thr
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Val	Cys	Tyr	Val	Lys	Phe	Arg	Asp	Pro	Ser	Ser	Val	Gly	Val	Ala	Gln
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His	Leu	Thr	Asn	Thr	Val	Phe	Ile	Asp	Arg	Ala	Leu	Ile	Val	Val	Pro
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Cys	Ala	Glu	Gly	Lys	Ile	Pro	Glu	Ser	Lys	Ala	Leu	Ser	Leu	Leu	
		115					120					125			
Ala	Pro	Ala	Pro	Thr	Met	Thr	Ser	Leu	Met	Pro	Gly	Ala	Gly	Leu	Leu
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Leu	Gly	Glu	Ile	Pro	Gln	Pro	Pro	Leu	Met	Gly	Asn	Val	Asp	Pro	Ser
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195	200	205
Gln Thr Thr Thr Ala Asp	Gln Leu Leu Glu Phe Phe	Lys Gln Val Gly
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Glu Val Lys Phe Ala Asp	Gly Arg Ile Asn His Ser	Asn Asn Ala Ile
225	230	235
Val Lys Pro Pro Glu Met Thr	Pro Gln Ala Ala Lys	Glu Leu Glu
245	250	255
Glu Val Met Lys Arg Val Arg	Glu Ala Gln Ser Phe Ile	Ser Ala Ala
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Ile Glu Pro Glu Ser Gly Lys	Ser Asn Glu Arg Lys	Gly Gly Arg Ser
275	280	285
Arg Ser His Thr Arg Ser Lys	Ser Arg Ser Ser Ser	Lys Ser His Ser
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Arg Arg Lys Arg Ser Gln Ser	Lys His Arg Ser Arg	Ser His Asn Arg
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Ser Arg Ser Arg Gln Lys Asp	Arg Arg Arg Ser Lys	Ser Pro His Lys
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Ser Arg Asp Lys Arg Lys Asp	Thr Arg Glu Lys Ile	Lys Glu Lys Glu
355	360	365
Arg Val Lys Glu Lys Asp Arg	Glu Lys Glu Arg Glu	Arg Glu Lys Glu
370	375	380
Arg Glu Lys Glu Lys Glu Arg	Gly Lys Asn Lys Asp	Arg Asp Lys Glu
385	390	395
Arg Glu Lys Asp Arg Glu Lys	Asp Lys Asp Arg Glu	Arg Glu Arg Glu
405	410	415
Arg Glu Lys Glu His Glu Lys	Asp Arg Asp Lys Glu	Lys Glu Lys Glu
420	425	430
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Glu Lys Lys Lys Glu Gly		
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<210> 3323

<211> 949

<212> DNA

<213> Homo sapiens

<400> 3323

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180

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240

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300

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360

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<210> 3324

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3324

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Thr	Thr	Val	Ile	Pro	Arg	Val	Tyr	Thr	Tyr	Tyr	Val	Ser	Thr	Val	Leu
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65					70					75				80	
Lys	Lys	Asp	Glu	Glu	Val	Ser	His	Gly	Thr	Val	Asp	Leu	Asp	Gln	Lys
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<211> 5055

<212> DNA

<213> Homo sapiens

<400> 3325

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<210> 3326

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3326

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His Gln Gln Gln Met Ala Pro Ser Thr Leu Ser Gln Gln Asn Arg Pro
50 55 60
Thr Gln Asn Pro Pro Ala Gly Leu Met Ser Met Pro Asn Ala Leu Thr
65 70 75 80
Thr Gln Gln Gln Gln Gln Gln Lys Leu Arg Leu Gln Arg Ile Gln Met
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Glu Arg Glu Arg Ile Arg Met Arg Gln Glu Glu Leu Met Arg Gln Glu
100 105 110
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Ile Thr Asn Asn Ser Ser Asp Pro Phe Leu Asn Gly Gly Pro Tyr His
145 150 155 160
Ser Arg Glu Gln Ser Thr Asp Ser Gly Leu Gly Leu Gly Cys Tyr Ser
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180 185 190
Thr Gly Glu Asn Ala Gly Gln Thr Pro Met Asn Ile Asn Pro Gln Gln
195 200 205
Thr Arg Phe Pro Asp Phe Leu Asp Cys Leu Pro Gly Thr Asn Val Asp
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Leu Gly Thr Leu Glu Ser Glu Asp Leu Ile Pro Leu Phe Asn Asp Val
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<210> 3327

<211> 2263

<212> DNA

<213> Homo sapiens

<400> 3327

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<210> 3328

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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 35 40 45
 Ala Leu Lys Ser Ala Arg Asp Met Trp Ala Asp Tyr Ile Leu Phe Val
 50 55 60
 Asp Ala Asp Asn Leu Ile Leu Asn Pro Asp Thr Leu Ser Leu Leu Ile
 65 70 75 80
 Ala Glu Asn Lys Thr Val Val Ala Pro Met Leu Asp Ser Arg Ala Ala
 85 90 95
 Tyr Ser Asn Phe Trp Cys Gly Met Thr Ser Gln Gly Tyr Tyr Lys Arg
 100 105 110
 Thr Pro Ala Tyr Ile Pro Ile Arg Lys Arg Asp Arg Arg Gly Cys Phe
 115 120 125
 Ala Val Pro Met Val His Ser Thr Phe Leu Ile Asp Leu Arg Lys Ala
 130 135 140
 Ala Ser Arg Asn Leu Ala Phe Tyr Pro Pro His Pro Asp Tyr Thr Trp
 145 150 155 160
 Ser Phe Asp Asp Ile Val Phe Ala Phe Ser Cys Lys Gln Ala Glu
 165 170 175
 Val Gln Met Tyr Val Cys Asn Lys Glu Glu Tyr Gly Phe Leu Pro Val
 180 185 190
 Pro Leu Arg Ala His Ser Thr Leu Gln Asp Glu Ala Glu Ser Phe Met
 195 200 205
 His Val Gln Leu Glu Val Met Val Lys His Pro Pro Ala Glu Pro Ser
 210 215 220
 Arg Phe Ile Ser Ala Pro Thr Lys Thr Pro Asp Lys Met Gly Phe Asp
 225 230 235 240
 Glu Val Phe Met Ile Asn Leu Arg Arg Arg Gln Asp Arg Arg Glu Arg
 245 250 255
 Met Leu Arg Ala Leu Gln Ala Gln Glu Ile Glu Cys Arg Leu Val Glu

260 265 270
 Ala Val Asp Gly Lys Ala Met Asn Thr Ser Gln Val Glu Ala Leu Gly
 275 280 285
 Ile Gln Met Leu Pro Gly Tyr Arg Asp Pro Tyr His Gly Arg Pro Leu
 290 295 300
 Thr Lys Gly Glu Leu Gly Cys Phe Leu Ser His Tyr Asn Ile Trp Lys
 305 310 315 320
 Glu Val Val Asp Arg Gly Leu Gln Lys Ser Leu Val Phe Glu Asp Asp
 325 330 335
 Leu Arg Phe Glu Ile Phe Phe Lys Arg Arg Leu Met Asn Leu Met Arg
 340 345 350
 Asp Val Glu Arg Glu Gly Leu Asp Trp Asp Leu Ile Tyr Val Gly Arg
 355 360 365
 Lys Arg Met Gln Val Glu His Pro Glu Lys Ala Val Pro Arg Val Arg
 370 375 380
 Asn Leu Val Glu Ala Asp Tyr Ser Tyr Trp Thr Leu Ala Tyr Val Ile
 385 390 395 400
 Ser Leu Gln Gly Ala Arg Lys Leu Leu Ala Ala Glu Pro Leu Ser Lys
 405 410 415
 Met Leu Pro Val Asp Glu Phe Leu Pro Val Met Phe Asp Lys His Pro
 420 425 430
 Val Ser Glu Tyr Lys Ala His Phe Ser Leu Arg Asn Leu His Ala Phe
 435 440 445
 Ser Val Glu Pro Leu Leu Ile Tyr Pro Thr His Tyr Thr Gly Asp Asp
 450 455 460
 Gly Tyr Val Ser Asp Thr Glu Thr Ser Val Val Trp Asn Asn Glu His
 465 470 475 480
 Val Lys Thr Asp Trp Asp Arg Ala Lys Ser Gln Lys Met Arg Glu Gln
 485 490 495
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 Leu Asp Ser Ala Ala Arg Asp Glu Leu
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<210> 3329

<211> 705

<212> DNA

<213> Homo sapiens

<400> 3329

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 120
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 180
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 300
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 360
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 420

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 480
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 540
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<210> 3330

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

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		20						25					30		
Asn	Ser	Thr	Phe	Ala	Trp	Phe	Trp	Asn	Asp	Arg	Arg	Leu	His	Ala	Glu
		35				40						45			
Pro	Val	Pro	Thr	Leu	Ala	Phe	Thr	His	Val	Ala	Arg	Ala	Gln	Ala	Gly
	50					55					60				
Met	Tyr	His	Cys	Leu	Ala	Glu	Leu	Pro	Thr	Gly	Ala	Ala	Ala	Ser	Ala
65				70						75				80	
Pro	Val	Met	Leu	Arg	Val	Leu	Tyr	Pro	Pro	Lys	Thr	Pro	Thr	Met	Met
				85					90					95	
Val	Phe	Val	Glu	Pro	Glu	Gly	Gly	Leu	Arg	Gly	Ile	Leu	Asp	Cys	Arg
		100						105					110		
Val	Asp	Ser	Glu	Pro	Leu	Ala	Ser	Leu	Thr	Leu	His	Leu	Gly	Ser	Arg
		115					120					125			
Leu	Val	Ala	Ser	Ser	Gln	Pro	Gln	Gly	Ala	Pro	Ala	Glu	Pro	His	Ile
	130					135					140				
His	Val	Leu	Ala	Ser	Pro	Asn	Ala	Leu	Arg	Val	Asp	Ile	Glu	Ala	Leu
145				150						155				160	
Arg	Pro	Ser	Asp	Gln	Gly	Glu	Tyr	Ile	Cys	Ser	Ala	Ser	Asn	Val	Leu
			165					170					175		
Gly	Ser	Ala	Ser	Thr	Ser	Thr	Tyr	Phe	Gly	Val	Arg	Ala	Leu	His	Arg
		180						185					190		
Leu	His	Gln	Phe	Gln	Gln	Leu	Leu	Trp	Val	Leu	Gly	Leu	Leu	Val	Gly
	195					200					205				
Leu	Leu	Leu	Leu	Leu	Leu	Gly	Leu	Gly	Ala	Cys	Tyr	Thr	Trp	Arg	Arg
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<210> 3331

<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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120
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180
atttccaag gagagggtgc tatggtgaca gactatgggg cctttatcaa aatcccaggc
240
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300
tctgagatag tagatgttg agataaagtg tgggtgaagc ttattggccg agagatgaaa
360
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420
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480
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540
gtaaaggcca ctttgcaaaa gattgtttca tgcaaccagg tgggactaaa tactctctga
600
tacctgatga ggaagaggaa aaggaagagg caaagtcagc agagttagg aagcctgacc
660
ctacaaggaa tccttctaga aaaagaaaga aggagaagaa gaaaaagaaa catagagata
720
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780
acacatcaaa agacagcaag gcagcaaaga agaagaaaa gaagaagaag cacaagaaga
840
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900
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960
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1620

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1644

<210> 3332

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3332

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Thr	Ile	Phe	Gln	Gly	Glu	Val	Ala	Met	Val	Thr	Asp	Tyr	Gly	Ala	Phe
			20					25					30		
Ile	Lys	Ile	Pro	Gly	Cys	Arg	Lys	Gln	Gly	Leu	Val	His	Arg	Thr	His
		35				40						45			
Met	Ser	Ser	Cys	Arg	Val	Asp	Lys	Pro	Ser	Glu	Ile	Val	Asp	Val	Gly
	50					55					60				
Asp	Lys	Val	Trp	Val	Lys	Leu	Ile	Gly	Arg	Glu	Met	Lys	Asn	Asp	Arg
65					70					75				80	
Ile	Lys	Val	Ser	Leu	Ser	Met	Lys	Val	Val	Asn	Gln	Gly	Thr	Gly	Lys
			85					90						95	
Asp	Leu	Asp	Pro	Asn	Asn	Val	Ser	Leu	Ser	Lys	Lys	Arg	Gly	Gly	Gly
			100					105					110		
Asp	Pro	Ser	Arg	Ile	Thr	Leu	Gly	Arg	Arg	Ser	Pro	Leu	Arg	Leu	Ser
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<210> 3333

<211> 2422

<212> DNA

<213> Homo sapiens

<400> 3333

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180
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360
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420
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480
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600
tctctctcca ttccatcgac tcccagcacc agccaggagg accctcagtt cagtgttctt
660

cccactgcc aacacacccac ccccgtttgc aagcgggtcca tgcgctgggc caacctgttt
720
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780
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2280

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 2400
 aaaaaaaggg aaaaaaaaaa ag
 2422

<210> 3334
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 3334

Leu	Glu	Phe	Asp	Gln	Gln	Gly	Ser	Val	Cys	Pro	Ser	Glu	Ser	Glu
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Ile	Tyr	Glu	Ala	Gly	Ala	Gly	Asp	Arg	Met	Ala	Gly	Ala	Pro	Met
		20					25					30		
Ala	Ala	Val	Gln	Pro	Ala	Glu	Val	Thr	Val	Glu	Val	Gly	Glu	Asp
		35					40					45		Leu
His	Met	His	His	Val	Arg	Asp	Arg	Glu	Met	Pro	Glu	Ala	Leu	Glu
	50					55					60			Phe
Asn	Leu	Ser	Ala	Asn	Pro	Glu	Ser	Ser	Thr	Ile	Phe	Gln	Arg	Asn
65				70						75				80
Gln	Thr	Glu	Ala	Leu	Glu	Phe	Asn	Pro	Ser	Ala	Asn	Pro	Glu	Ala
			85					90					95	Ser
Thr	Ile	Phe	Gln	Arg	Asn	Ser	Gln	Thr	Asp	Val	Val	Glu	Ile	Arg
		100					105					110		Arg
Ser	Asn	Cys	Thr	Asn	His	Val	Ser	Ala	Val	Arg	Phe	Ser	Gln	Gln
	115						120					125		Tyr
Ser	Leu	Cys	Ser	Thr	Ile	Phe	Leu	Asp	Asp	Ser	Thr	Ala	Ile	Gln
	130					135					140			His
Tyr	Leu	Thr	Met	Thr	Ile	Ile	Ser	Val	Thr	Leu	Glu	Ile	Pro	His
145				150						155				160
Ile	Thr	Gln	Arg	Asp	Ala	Asp	Arg	Thr	Leu	Ser	Ile	Pro	Asp	Glu
		165						170					175	Gln
Leu	His	Ser	Phe	Ala	Val	Ser	Thr	Val	His	Ile	Met	Lys	Lys	Arg
		180					185					190		Asn
Gly	Gly	Gly	Ser	Leu	Asn	Asn	Tyr	Ser	Ser	Ser	Ile	Pro	Ser	Thr
	195						200					205		Pro
Ser	Thr	Ser	Gln	Glu	Asp	Pro	Gln	Phe	Ser	Val	Pro	Pro	Thr	Ala
	210				215						220			Asn
Thr	Pro	Thr	Pro	Val	Cys	Lys	Arg	Ser	Met	Arg	Trp	Ser	Asn	Leu
225				230					235					240
Thr	Ser	Glu	Lys	Gly	Ser	His	Pro	Asp	Lys	Glu	Arg	Lys	Ala	Pro
		245						250					255	Glu
Asn	His	Ala	Asp	Thr	Ile	Gly	Ser	Gly	Arg	Ala	Ile	Pro	Ile	Lys
		260					265					270		Gln
Gly	Met	Leu	Leu	Lys	Arg	Ser	Gly	Lys	Trp	Leu	Lys	Thr	Trp	Lys
	275						280					285		Lys
Lys	Tyr	Val	Thr	Leu	Cys	Ser	Asn	Gly	Met	Leu	Thr	Tyr	Tyr	Ser
	290				295						300			Ser
Leu	Gly	Asp	Tyr	Met	Lys	Asn	Ile	His	Lys	Lys	Glu	Ile	Asp	Leu
305				310					315					Gln
Thr	Ser	Thr	Ile	Lys	Val	Pro	Gly	Lys	Trp	Pro	Ser	Leu	Ala	Thr
														Ser

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<210> 3335
<211> 477
<212> DNA
<213> Homo sapiens
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2524

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 300
 ccgccgctc gcatttgccc tgagacaggg ctggacagcc aggattaccg ctgtgccgag
 360
 tgccggggcg ccattctctt gcgggggtgtg cccagtgagg ccaggcagtg cgactacacc
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 477

<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

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Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile	Ser	Leu	Arg	Gly	Val	Pro	Ser
		20						25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
	35						40					45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
	50						55								

<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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 aaaaagagaa agagagacac cccacagaga ggggggaagg aggttagatg gggcagtcct
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 agcttagcct ccaaagacac agatagagtg agagagagag acagagagag acacagagac
 180
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 240
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 300
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 420
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 480
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 540
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 679

<210> 3338

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3338

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		20					25				30				
Lys	Glu	Val	Arg	Trp	Gly	Ser	Leu	Ser	Leu	Ala	Ser	Lys	Asp	Thr	Asp
	35				40					45					
Arg	Val	Arg	Glu	Arg	Asp	Arg	Glu	Arg	His	Arg	Asp	Arg	Gln	Arg	Pro
	50				55					60					
Lys	Gln	Lys	Arg	Gln	Thr	Ala	Lys	Thr	Lys	Gln	Asn	Gln	Cys	Lys	Leu
65				70					75					80	
Glu	Lys	Lys	Ile	Lys	Leu	Asn	Ile	Arg	Ala	Gly	Lys	Ser	His	Leu	Leu
			85					90						95	
Arg	Ile	Thr	Pro	Val	Tyr										
			100												

<210> 3339

<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3339

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 180
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 240
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 300
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 360
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 420
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<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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Ser	Val	Asn	Ile	Phe	Leu	Tyr	Gln	Asn	Cys	Tyr	Tyr	Ala	Ala	Phe	Ile
		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35					40					45			
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
		50				55				60					
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
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<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 120

ctggagcatg accacagacc cattcagga ggctggcgga ctcttcatcc tggacagtcc
 180
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 240
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 480
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 660
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 720
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<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

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			20					25						30	
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
			35					40						45	
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Asp	Phe	Tyr	Gln
			50					55						60	
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
			65					70						75	
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85					90						95	
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu

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 Phe Gln Asp Arg Thr Cys Glu Ile Val Glu Asp Thr Glu Ser Ser Arg
 115 120 125
 Met Val Lys Lys Met Lys Lys Arg Ile Cys Leu Val Leu Asp Cys Leu
 130 135 140
 Cys Ala His Asp Phe Ser Asp Lys Thr Ala Asp Leu Ile Asn Leu Gln
 145 150 155 160
 His Tyr Val Ile Lys Glu Lys Arg Leu Ser Glu Arg Glu Thr Val Val
 165 170 175
 Ile Phe Tyr Asp Val Val Arg Val Val Glu Ala Leu His Gln Lys Asn
 180 185 190
 Ile Val His Arg Asp Leu Lys Leu Gly Asn Met Val Leu Asn Lys Arg
 195 200 205
 Thr His Arg Ile Thr Ile Thr Asn Phe Cys Leu Gly Lys His Leu Val
 210 215 220
 Ser Glu Gly Asp Leu Leu Lys Asp Gln Arg Gly Ser Pro Ala Tyr Ile
 225 230 235 240
 Ser Pro Asp Val Leu Ser Gly Arg Pro Tyr Arg Gly Lys Pro Ser Asp
 245 250 255
 Met Trp Ala Leu Gly Val Val Leu Phe Thr Met Leu Tyr Gly Gln Phe
 260 265 270
 Pro Phe Tyr Asp Ser Ile Pro Gln Glu Leu Phe Arg Lys Ile Lys Ala
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 Cys Leu Ile Arg
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<210> 3343

<211> 594

<212> DNA

<213> Homo sapiens

<400> 3343

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<210> 3344

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3344

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Tyr Arg His Asn Arg Pro Leu Leu Ser Gly Val Ser Asp Thr Glu Ala
      20             25             30
Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly
      35             40             45
Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
      50             55             60
Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
      65             70             75             80
Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
      85             90             95
Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
      100            105            110
Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr
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Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu
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<210> 3345

<211> 1149

<212> DNA

<213> Homo sapiens

<400> 3345

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660

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<210> 3346

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3346

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			20					25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35				40					45				
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65					70					75				80	
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
				85					90					95	
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
			100					105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
		115				120						125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
145					150					155				160	
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
				165					170					175	
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
			180					185					190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
		195				200						205			
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210					215					220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

2532

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 <211> 288
 <212> PRT
 <213> Homo sapiens

 <400> 3348
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 35 40 45
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met
 50 55 60
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met
 65 70 75 80
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val
 85 90 95
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
 115 120 125
 Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
 130 135 140
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
 145 150 155 160
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
 165 170 175
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
 180 185 190
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
 195 200 205
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
 210 215 220
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
 225 230 235 240
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
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<210> 3349

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3349

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<210> 3350

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3350

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	20						25					30			
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
	35					40					45				
Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
	50				55					60					
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
65					70				75					80	
Val	Gly	Met	Lys	Asn	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val
			85				90						95		
Ala	Arg	His	Phe	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	His	Thr
		100					105						110		
Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
	115					120					125				
Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
	130				135					140					
Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
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<210> 3351

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 3351

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<210> 3352

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3352

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 Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Pro Gly His
 35 40 45
 Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala Ala His Arg Gly Gln
 50 55 60
 Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
 65 70 75 80
 Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
 85 90 95
 Ser

<210> 3353

<211> 420

<212> DNA

<213> Homo sapiens

<400> 3353

nngaagctat cctcatcctc ttcccacact cggtcctgtg aagtccttgg aattaacatc
 60
 ttcccatctc ctgaccagcc tgccaatgtg cctgtcctcc cactgcccac gaacacgggg
 120
 ggctccctac ctgacctcac caacctgcac ttccccccac cactgcccac cccctgggac
 180
 cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctcaa tttgacctac
 240
 accatgactc acctgggcat cagcaggggc atgggcctgg gccagggcta tgatgcacca
 300
 gggcgcccc ctggatacca gtaaactgtc cactgaccag cggttacccc cataccata
 360
 cagttcccca agtttggtnt ctgcttacct agccccacac cccaaagttt taacagcagc
 420

<210> 3354

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3354

Xaa Lys Leu Ser Ser Ser Ser Arg Pro Arg Ser Cys Glu Val Pro
 1 5 10 15
 Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
 20 25 30
 Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
 35 40 45
 Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
 50 55 60
 Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
 65 70 75 80
 Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
 85 90 95
 Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
 100 105

<210> 3355
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3355
 gaacagccag ttgaacctga tggccccctt cctggctcag acaataacca agaaaagaaa
 60
 gtaagattat ctccagccaa aatgtcaacc aagaattcta cagatctagt tgaatatgtt
 120
 gacaagagtc atgcttttct ccccatcatt ccaaacaccc agagaggtca gctagaagac
 180
 agactgaaca accaggcgcg taccatagct ttccttcttg aacaagcctt ccgcatcaag
 240
 gaggacatct ctgcttgccct gcaggggacc catggctttc gaaaagagga atcgctcgcc
 300
 aggaagttac tggaaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa
 360
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcggccac aggaactaac
 420
 tttgcagtac acgagataaa catcaaacac ctacaaggag ttggggagatc tttc
 474

<210> 3356
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3356
 Met Ser Thr Lys Asn Ser Thr Asp Leu Val Glu Tyr Val Asp Lys Ser
 1 5 10 15
 His Ala Phe Leu Pro Ile Ile Pro Asn Thr Gln Arg Gly Gln Leu Glu
 20 25 30
 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln
 35 40 45
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
 50 55 60
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
 65 70 75 80
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
 85 90 95
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
 100 105 110
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly
 115 120 125
 Arg Ser Phe
 130

<210> 3357
 <211> 2268
 <212> DNA
 <213> Homo sapiens

<400> 3357

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60
agcagccatt atggatttgg atgtgctctt tatacccatg tctctaattg cagatggagg
120
agggcctata aaaataattc cttcttgctt acaaagttca gcaaattcca tgttttctga
180
aagaaaaccg catcctggat ggatagcctg tgcagcagag gtcttgcca cttgaatgat
240
tttctccata gataggtagc tctgctggga ggaacgggtt tggcgtgtgg gacgcagctg
300
cctctgtact ggggagtcac ggagtggccg ggctccaggg acatggcggc ggcctctgcg
360
gtgtcgggtg tgcgtggggc ggcggagagg aaccgggtgg atcgtctccc gaggctgctc
420
ctgccgccga ggacatgggt gtggaggcaa agaaccatga agtacacaac agccacagga
480
agaacatta ccaaggtcct cattgcaaac agaggagaaa ttgcctgcag ggtgatgcgc
540
acagccaaaa aactgggtgt acagactgtg gcggtttata gtgaggctga cagaaattcc
600
atgcatttag atatggcaga tgaagcatat tccatcgcc ccgctccctc ccagcagagc
660
tacctatcta tggagaaaat cattcaagtg gccaaagacct ctgctgcaca ggctatccat
720
ccaggatgcg gttttctttc agaaaacatg gaatttgctg aactttgtaa gcaagaagga
780
attattttta taggcctcc tccatctgca attagagaca tgggtataaa gagcacatcc
840
aaatccataa tggctgtgctg tggagtacct gttgtggagg gttatcatgg tgaggaccaa
900
tcagaccagt gcctgaagga acacgccagg agaattggct atcctgtcat gattaaagcc
960
gtccgggggtg gaggaggaaa aggaatgagg attgttagat cagaacaaga atttcaagaa
1020
cagtttagat cagcacggag agaagctaag aagtctttca atgatgatgc tatgctgatc
1080
gagaagtttg tagacacacc gaggcattga gaagtccagg tgtttggtga tcaccatggc
1140
aatgctgtgt acttgtttga aagagactgt agtgtgcaga ggcgacatca gaagatcatt
1200
gaggaggccc cagcgcttg tattaaatct gaagtaagaa aaaagctggg agaagctgca
1260
gtcagagctg ctaaagctgt aaattatgtt ggagcaggga ctgtggagtt tattatggac
1320
tcaaaacata atttctgttt catggagatg aatacaaggc tgcaagtgga acatcctgtt
1380
actgagatga tcacaggaac tgacttggtg gagtggcagc ttagaattgc agcaggagag
1440
aagattcctt tgagccagga agaaataact ctgcagggcc atgccttcga agctagaata
1500
tatgcagaag atcctagcaa taacttcatt cctgtggcag gccattagt gcacctctct
1560
actcctcgag cagacccttc caccaggatt gaaactggag tacggcaagg agacgaagtt
1620

tccgtgcatt atgaccccat gattgcgaag ctggctcgtgt gggcagcaga tcgccaggcg
 1680
 gcattgacaa aactgaggta cagccttcgt cagtacaata ttgttggaact gcacaccaac
 1740
 attgacttct tactcaacct gtctggccac ccagagtttg aagctgggaa cgtgcacact
 1800
 gatttcaccc ctcaacacca caaacagttg ttgctcagtc ggaaggctgc agccaaagag
 1860
 tctttatgcc aggcagccct gggctctatc ctcaaggaga aagccatgac cgacactttc
 1920
 actcttcagg cacatgatca attctctcca tttctgtcta gcagtggaag aagactgaat
 1980
 atctcgtata ccagaaacat gactcttaaa gatggtaaaa acagttttcg tctctcgga
 2040
 taatcaacca tttccatact catgtaatct aggcatactc tggagttatt acaggtttgg
 2100
 ttccagacca ctacaataaa atgtagccat agctgtaacg tataaccatg atgggtctta
 2160
 tagcatgcag attgaagata aaactttcca agtccttggt aatctttaca gcgagggaga
 2220
 ctgcacttac ctgaaatggt ctgttaatgg agttgctagt aaagcgaa
 2268

<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

Gln	Thr	Val	Ala	Val	Tyr	Ser	Glu	Ala	Asp	Arg	Asn	Ser	Met	His	Val
1				5					10					15	
Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
		20						25					30		
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
		35				40						45			
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65				70					75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
			85					90					95		
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
		100						105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
		115					120					125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145				150						155				160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
			165					170					175		
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
		180						185					190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

195	200	205
His Gln Lys Ile Ile Glu Glu Ala Pro Ala Pro Gly Ile Lys Ser Glu		
210	215	220
Val Arg Lys Lys Leu Gly Glu Ala Ala Val Arg Ala Ala Lys Ala Val		
225	230	235
Asn Tyr Val Gly Ala Gly Thr Val Glu Phe Ile Met Asp Ser Lys His		
245	250	255
Asn Phe Cys Phe Met Glu Met Asn Thr Arg Leu Gln Val Glu His Pro		
260	265	270
Val Thr Glu Met Ile Thr Gly Thr Asp Leu Val Glu Trp Gln Leu Arg		
275	280	285
Ile Ala Ala Gly Glu Lys Ile Pro Leu Ser Gln Glu Glu Ile Thr Leu		
290	295	300
Gln Gly His Ala Phe Glu Ala Arg Ile Tyr Ala Glu Asp Pro Ser Asn		
305	310	315
Asn Phe Met Pro Val Ala Gly Pro Leu Val His Leu Ser Thr Pro Arg		
325	330	335
Ala Asp Pro Ser Thr Arg Ile Glu Thr Gly Val Arg Gln Gly Asp Glu		
340	345	350
Val Ser Val His Tyr Asp Pro Met Ile Ala Lys Leu Val Val Trp Ala		
355	360	365
Ala Asp Arg Gln Ala Ala Leu Thr Lys Leu Arg Tyr Ser Leu Arg Gln		
370	375	380
Tyr Asn Ile Val Gly Leu His Thr Asn Ile Asp Phe Leu Leu Asn Leu		
385	390	395
Ser Gly His Pro Glu Phe Glu Ala Gly Asn Val His Thr Asp Phe Ile		
405	410	415
Pro Gln His His Lys Gln Leu Leu Leu Ser Arg Lys Ala Ala Ala Lys		
420	425	430
Glu Ser Leu Cys Gln Ala Ala Leu Gly Leu Ile Leu Lys Glu Lys Ala		
435	440	445
Met Thr Asp Thr Phe Thr Leu Gln Ala His Asp Gln Phe Ser Pro Phe		
450	455	460
Ser Ser Ser Ser Gly Arg Arg Leu Asn Ile Ser Tyr Thr Arg Asn Met		
465	470	475
Thr Leu Lys Asp Gly Lys Asn Ser Phe Arg Leu Leu Gly		
485	490	

<210> 3359

<211> 652

<212> DNA

<213> Homo sapiens

<400> 3359

ntccggacgt aatcgtggtt ttgtttctgc aataggcggc ttagagggag gggctttttc
60

gcctatacct actgtagctt ctccacgtat ggaccctaaa ggctactgct gctactacgg
120

ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga
180

gggaggtaat taaaaaacag tggaatggaa aaacagtgc gtagtcatcc tgtaatatgc
240

tccttgtaaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt
300

cgcatcttac tagtgaagta ttctgccaat gaagaaaaca agtatgatta tcttccaact
 360
 actgtgaatg tgtgtcaga actggtgaag ctagtcttct gtgtgcttgt gtcattctgt
 420
 gttataaaga aagatcatca aagtagaaat ttgaaatatg cttcctggaa ggaattctct
 480
 gatttcatga agtgggccat tcttgccctt ctttatttcc tggataacct gattgtcttc
 540
 tatgtcctgt cctatcttca accagccatg gctgttatct tctcaaattt tagcattata
 600
 acaacagctc ttctattcag gatagtgtg aagagggcgc taaactggat cc
 652

<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Lys	Gln	Cys	Cys	Ser	His	Pro	Val	Ile	Cys	Ser	Leu	Ser	Thr
1				5					10					15	
Met	Tyr	Thr	Phe	Leu	Leu	Gly	Ala	Ile	Phe	Ile	Ala	Leu	Ser	Ser	Ser
			20				25					30			
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
	35					40					45				
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70				75					80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90					95		
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100				105					110			
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115				120						125			
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
	130					135					140				
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

nntccgcatg gtctggcgcg ctgggctcgc taggtttgtg ctggcgaggg gacgggggtg
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 gacgggagc cgggacccaa gaagtgggag gaccgcgcgt gtcgcggcct agcggcgagg
 120
 ggagtcgcct gcgcgcgcag cggaggccag tgcgccggcg catagcgagc cggggtctgt
 180
 gatcgccgag gcgggagtga agatagtcca agtcctaaga gacagcgcct ctctcattca
 240

gtctttgatt atacatcagc atcaccagct cctcaccac caatgcgacc atgggagatg
 300
 acatcaaata ggcagccccc ttcagttcga ccaagccaac atcacttctc aggggaacga
 360
 tgcaacacac ctgcacgcaa cagaagaagt cctcctgtca ggcgccagag aggaagaagg
 420
 gatcgtctgt ctgcacataa ttccattagt caagatgaaa actatcacca tctcccttac
 480
 gcacagcagc aagcaataga ggagcctcga gccttccacc ctccgaatgt atctccccgt
 540
 ctgctacatc ctgctgtcga tccacccag cagaatgcag tcatgggtga catacatgat
 600
 cagctccatc aaggaacagt cctgttttct tacacagtaa caacagtggc accacatggg
 660
 attccactct gcacaggcca gcacatccct gctttagta cacagcaggt cccaggatgc
 720
 tctgtggttt tcaaggaca gcacctcct gtctgtagt tgctcctcc aatgcttcag
 780
 gcatgttcag ttcagcactt accagtacca tatgtgtcat tccacctcct tatttctagt
 840
 gatccatttc ttatacatcc tctcacctt tctcccatc atctcctca ttgcccacca
 900
 ccaggccagt ttgtcccttt ccaaacacag caatcacgat cgcctctgca aaggatagaa
 960
 aatgaagtgg aactcttagg agaacatctt ccaggagccc acccccagca ccccatctg
 1020
 ttaataaata tctcaactcc
 1040

<210> 3362

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3362

Met	Arg	Pro	Trp	Glu	Met	Thr	Ser	Asn	Arg	Gln	Pro	Pro	Ser	Val	Arg
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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35					40					45		
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
	50				55					60					
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70					75					80
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85					90					95	
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100					105					110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Thr	Val	Ala	Pro	His	Gly	Ile	Pro
		115					120					125			
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
	130					135					140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

145		150		155		160									
Pro	Pro	Pro	Met	Leu	Gln	Ala	Cys	Ser	Val	Gln	His	Leu	Pro	Val	Pro
		165							170					175	
Tyr	Ala	Ala	Phe	Pro	Pro	Leu	Ile	Ser	Ser	Asp	Pro	Phe	Leu	Ile	His
		180						185					190		
Pro	Pro	His	Leu	Ser	Pro	His	His	Pro	Pro	His	Leu	Pro	Pro	Pro	Gly
		195					200					205			
Gln	Phe	Val	Pro	Phe	Gln	Thr	Gln	Gln	Ser	Arg	Ser	Pro	Leu	Gln	Arg
	210					215					220				
Ile	Glu	Asn	Glu	Val	Glu	Leu	Leu	Gly	Glu	His	Leu	Pro	Gly	Ala	His
225				230					235				240		
Pro	Gln	His	Pro	His	Leu	Leu	Ile	Asn	Ile	Ser	Thr				
		245					250								

<210> 3363

<211> 718

<212> DNA

<213> Homo sapiens

<400> 3363

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60
ggccagcatg atcagggacc ccgtcatgcc catgattttt tgggtggcat tggcgaccga
120
gtagctcagg agtgtctccg gagccactg gagaagcccc ccaacggcct cctcttcccc
180
cagcacgggg actatcagta cggcgcgaac aacatctaaa cagaccactt ccaatacagc
240
cggcagagct acccaaactc gtacagtttg aaccgctatg atgtgtagag tccaaaggac
300
aggaccagac tgttggtgac tccttccccg gccccacag cagtatcaga aacttctgac
360
aatcagtga tgtacaacct agccgagggg acggtgcata actctccatc agaagccctg
420
gggttctctg cccccctga gccgcaggag gatgcgttgc ctgcagtgcg gacggccgtg
480
agctctgggc aaacctaaac agagaccagt gtccatgct ctttcttctt ggagcctgtc
540
atctgagggc cgtgtccctg cggagatctt ggccacgttg tacctttcca tgtggaatta
600
ttccccaagc agtgtagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct
660
gtgtgaaaag ctggggtcac tgtggctgta gaccatgaac tggcagtggg ggtgtcca
718

<210> 3364

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3364

Met	Gly	His	Trp	Ser	Leu	Phe	Arg	Phe	Ala	Gln	Ser	Ser	Arg	Pro	Ser
1				5						10				15	
Ala	Leu	Gln	Ala	Thr	His	Pro	Pro	Ala	Ala	His	Gly	Gly	Pro	Gly	Thr

20	25	30
Pro Gly Leu Leu Met Glu Ser Tyr Ala Pro Ser Pro Arg Leu Gly Cys		
35	40	45
Thr Phe Thr Asp Cys Gln Lys Phe Leu Ile Leu Leu Trp Gly Pro Gly		
50	55	60
Lys Glu Ser Pro Thr Val Trp Ser Cys Pro Leu Asp Ser Thr His His		
65	70	75
Ser Gly Ser Asn Cys Thr Ser Leu Gly Ser Ser Ala Gly Cys Ile Gly		
85	90	95
Ser Gly Leu Phe Arg Cys Cys Cys Gly Arg Thr Asp Ser Pro Arg Ala		
100	105	110
Gly Gly Arg Gly Gly Arg Trp Gly Ala Ser Pro Val Gly Ser Gly Asp		
115	120	125
Thr Pro Glu Leu Leu Gly Arg Gln Cys His Pro Lys Asn His Gly His		
130	135	140
Asp Gly Val Pro Asp His Ala Gly Gln Pro Ile Pro His His Gln Arg		
145	150	155
Ser Trp Ala		160

<210> 3365

<211> 2389

<212> DNA

<213> Homo sapiens

<400> 3365

gcaggaagat ggcggcggtg gcggagggtg gagtggacgc gggactcagc ggccggattt
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tctcttccct tcttttccct ttctcttccc tatttgaaat tggcatcgag ggggctaagt
120
tcgggtggca gcgcggggcg caacgcaggg gtcacggcga cggcggcggc ggctgacggc
180
tggaagggtg ggtctcttc accgctcgtc ctcttctc gctcgcctcg gtgtcaggcg
240
cggcggcggc gcggcgggcg gacttcgtcc ctctctctgc tccccccac accggagcgg
300
gcactcttcg ctctgccatc ccccgacct tcaccccgag gactgggcgc ctctccggc
360
gcagctgagg gagcggggcg cggctctctg ctcggttgtc gagcctccat gtcggataat
420
cagaactgga actcgtcggg ctccgaggag gatccagaga cggagtctgg gccgcctgtg
480
gagcgtcgcg gggctctcag taagtggaca aactacattc atgggtggca ggatcgttgg
540
gtagttttga aaaataatgc tctgagttac tacaaatctg aagatgaaac agagtatggc
600
tgcagaggat ccattctgtc tagcaaggct gtcacacac ctacagattt tgatgaatgt
660
cgatttgata ttagtgtaaa tgatagtgtt tggatcttc gtgctcagga tccagatcat
720
agacagcaat ggatagatgc cattgaacag cacaagactg aatctggata tggatctgaa
780
tccagcttgc gtcgacatgg ctcaatgggt tccctgggtg ctggagcaag tggctactct
840

gcaacatcca cctcttcatt caagaaaggc cacagtttac gtgagaagtt ggctgaaatg
900
gaaacattta gagacatctt atgtagacaa gttgacacgc tacagaagta ctttgatgcc
960
tgtgtgatg ctgtctctaa ggatgaactt caaagggata aagtggtaga agatgatgaa
1020
gatgactttc ctacaacgcg ttctgatggg gacttcttgc atagtaccaa cggcaataaa
1080
gaaaagttat ttccacatgt gacaccaaaa ggaattaatg gtatagactt taaaggggaa
1140
gcgataactt ttaaagcaac tactgctgga atccttgcaa cactttctca ttgtattgaa
1200
ctaattggtta aacgtgagga cagctggcag aagagactgg ataaggaaac tgagaagaaa
1260
agaagaacag aggaagcata taaaaatgca atgacagaac ttaagaaaaa atcccacttt
1320
ggaggaccag attatgaaga aggcctaac agtctgatta atgaagaaga gttctttgat
1380
gctgttgaag ctgctcttga cagacaagat aaaatagaag aacagtcaca gagtgaaaag
1440
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1860
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1920
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1980
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2040
gtccgtgcca aaataaatgt tgctatgatt tgtcaaacct tggtaagccc accagaggga
2100
aaccaggaaa ttagcaggga caacattcta tgcaagatta catatgtagc taatgtgaac
2160
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2280
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2389

<210> 3366

<211> 624

<212> PRT

<213> Homo sapiens

<400> 3366

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Glu Thr Glu Ser Gly Pro Pro Val Glu Arg Cys Gly Val Leu Ser Lys
 20          25          30
Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
 35          40          45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
 50          55          60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
 65          70          75          80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
 85          90          95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
 100         105         110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
 115         120         125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
 130         135         140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
 145         150         155         160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
 165         170         175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
 180         185         190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
 195         200         205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
 210         215         220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
 225         230         235         240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
 245         250         255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
 260         265         270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
 275         280         285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
 290         295         300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
 305         310         315         320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
 325         330         335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
 340         345         350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
 355         360         365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
 370         375         380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

```

```

385          390          395          400
Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala
          405          410          415
Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg
          420          425          430
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His
          435          440          445
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn
          450          455          460
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val
465          470          475          480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys
          485          490          495
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile
          500          505          510
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val
          515          520          525
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys
          530          535          540
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser
545          550          555          560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys
          565          570          575
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser
          580          585          590
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg
          595          600          605
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe
          610          615          620

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<210> 3367

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3367

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120
tgccttcccc acttcaggcc tcttagtgtc aaggatgtga gaggcaaggg ctgctgggag
180
agtattttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag
240
gagggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
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accagg
366

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<210> 3368

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3368

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Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
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Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
          20             25             30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
      35             40             45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
      50             55             60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65             70             75             80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
          85             90             95
Thr Leu Phe Pro Ser Gly Thr Arg
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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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gataaggagc agaaaaatca ggaaaactgt ggtgcaaaga agaataaaaa gaagaggaaa
120
aaggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgctt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcatctg cagttcctca tacaaccggg agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatgggtg aatttgagaa gaatttgat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatag tcttttaagt cttcgtacac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgagggtg aagaaacatc cattctgtgg catgttgagc
840
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900

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 960
 gacagttccc ttaggcagtt tgtgcatggc atcctttatt ctctatacat ggcttttagcg
 1020
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 1080
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 1140
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 1200
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 1260
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 1380
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 1405

<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

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			20					25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
	50					55					60				
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70				75					80	
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85					90						95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
			100					105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115					120					125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
	130					135					140				
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145				150					155					160	
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
			165					170						175	
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
		180						185					190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
		195					200					205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
	210					215					220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser

225 230 235 240
 Asp Leu Asp Lys Ala Tyr Gln Glu Leu Leu Arg Leu Ile Asn Lys Leu
 245 250 255
 Asp Thr Glu Pro Gln Trp Val Pro Ser Thr Trp Leu Arg
 260 265

<210> 3371

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3371

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 120
 ggtttcaaaa gtccgggtggc ctggggctgt atgggtccac cccctggggg ggttgaggaa
 180
 gttgctgtcg tctgaggtag tgccgtacgt gtagtctctg tcccgccttt tgccctggcc
 240
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 300
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 360
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 420
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 480
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 540
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 600
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 660
 acttttgaaa ccaaagatca gccagaatat gattccacag atggcgaggg tgactggagt
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<210> 3372

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3372

Gly Thr Ala Val Arg Val Val Leu Val Pro Ala Phe Ala Leu Ala Lys
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 20 25 30
 Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln Arg
 35 40 45
 Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp Leu

50 55 60
 Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile
 65 70 75 80
 Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro
 85 90 95
 Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp
 100 105 110
 Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp
 115 120 125
 Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro
 130 135 140
 Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys
 145 150 155 160
 Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu
 165 170 175
 Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr
 180 185 190
 Arg Ser Cys Gly Tyr Ala
 195

<210> 3373

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3373

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 360
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 480
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 720
 atgcat
 726

<210> 3374

<211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3374
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 20 25 30
 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro
 35 40 45
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
 50 55 60
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg
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 Gly Arg Gly Leu

<210> 3375
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 3375
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 180
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 393

<210> 3376
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 3376
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 20 25 30
 Pro Glu Pro Pro Ala Trp Ala Leu Gly Ala Gln Pro Ala Trp Gly Ala
 35 40 45
 Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys
 50 55 60
 Arg Ala Arg Ser Ala Ala Ser Gly Ala Pro Gly Thr Val Arg Ser Pro

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<210> 3377
<211> 5235
<212> DNA
<213> Homo sapiens
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2554

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1380
aaggatgttt aggtctgtga agaaaagaat ttctaggccg ggtgctgtgg ctacgcctg
1440
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1500
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1560
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1680
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1740
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1920
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1980
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3780
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3960
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4440
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4500

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<210> 3378

<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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Ala	Ser	Val	Ile	Gln	Phe	Gly	Lys	Ser	Ala	Lys	Arg	Thr	Pro	Glu	Ser
			20					25					30		
Thr	Gln	Ile	Gly	Gln	Tyr	Gly	Asn	Gly	Leu	Lys	Ser	Gly	Ser	Met	Arg
		35					40					45			
Ile	Gly	Lys	Asp	Phe	Ile	Leu	Phe	Thr	Lys	Lys	Glu	Asp	Thr	Met	Thr
	50					55					60				
Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
65					70					75				80	
Val	Ile	Val	Pro	Leu	Pro	Thr	Trp	Asn	Ala	Arg	Thr	Arg	Glu	Pro	Val
			85						90					95	
Thr	Asp	Asn	Val	Glu	Lys	Phe	Ala	Ile	Glu	Thr	Glu	Leu	Ile	Tyr	Lys
			100					105					110		
Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
		115					120					125			
Ile	Pro	Gly	Asp	Ser	Gly	Thr	Leu	Val	Ile	Ile	Phe	Asn	Leu	Lys	Leu
	130					135					140				
Met	Asp	Asn	Gly	Glu	Pro	Glu	Leu	Asp	Ile	Ile	Ser	Asn	Pro	Arg	Asp
145					150					155				160	
Ile	Gln	Met	Ala	Glu	Thr	Ser	Pro	Glu	Gly	Thr	Lys	Pro	Glu	Arg	Arg

2558

595	600	605
Pro Glu Ala Pro Arg Lys	Pro Ala Asn Thr Leu Val Lys Thr Ala Ser	
610	615	620
Arg Pro Ala Pro Leu Val Gln Gln Leu Ser Pro Ser Leu Leu Pro Asn		
625	630	635
Ser Lys Ser Pro Arg Glu Val Pro Ser Pro Lys Val Ile Lys Thr Pro		
645	650	655
Val Val Lys Lys Thr Glu Ser Pro Ile Lys Leu Ser Pro Ala Thr Pro		
660	665	670
Ser Arg Lys Arg Ser Val Ala Val Ser Asp Glu Glu Glu Val Glu Glu		
675	680	685
Glu Ala Glu Arg Arg Lys Glu Arg Cys Lys Arg Gly Arg Phe Val Val		
690	695	700
Lys Glu Glu Lys Lys Asp Ser Asn Glu Leu Ser Asp Ser Ala Gly Gly		
705	710	715
Glu Asp Ser Ala Asp Leu Lys Arg Ala Gln Lys Asp Lys Gly Leu His		
725	730	735
Val Glu Val Arg Val Asn Arg Glu Trp Tyr Thr Gly Arg Val Thr Ala		
740	745	750
Val Glu Val Gly Lys His Val Val Arg Trp Lys Val Lys Phe Asp Tyr		
755	760	765
Val Pro Thr Asp Thr Thr Pro Arg Asp Arg Trp Val Glu Lys Gly Ser		
770	775	780
Glu Asp Val Arg Leu Met Lys Pro Pro Ser Pro Glu His Gln Ser Leu		
785	790	795
Asp Thr Gln Gln Glu Gly Gly Glu Glu Glu Val Gly Pro Val Ala Gln		
805	810	815
Gln Ala Ile Ala Val Ala Glu Pro Ser Thr Ser Glu Cys Leu Arg Ile		
820	825	830
Glu Pro Asp Thr Thr Ala Leu Ser Thr Asn His Glu Thr Ile Asp Leu		
835	840	845
Leu Val Gln Ile Leu Arg Asn Cys Leu Arg Tyr Phe Leu Pro Pro Ser		
850	855	860
Phe Pro Ile Ser Lys Lys Gln Leu Ser Ala Met Asn Ser Asp Glu Leu		
865	870	875
Ile Ser Phe Pro Leu Lys Glu Tyr Phe Lys Gln Tyr Glu Val Gly Leu		
885	890	895
Gln Asn Leu Cys Asn Ser Tyr Gln Ser Arg Ala Asp Ser Arg Ala Lys		
900	905	910
Ala Ser Glu Glu Ser Leu Arg Thr Ser Glu Arg Lys Leu Arg Glu Thr		
915	920	925
Glu Glu Lys Leu Gln Lys Leu Arg Thr Asn Ile Val Ala Leu Leu Gln		
930	935	940
Lys Val Gln Glu Asp Ile Asp Ile Asn Thr Asp Asp Glu Leu Asp Ala		
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Tyr Ile Glu Asp Leu Ile Thr Lys Gly Asp		
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<210> 3379

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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 480
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 720
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 780
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 898

<210> 3380

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3380

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Ser	Pro	Ala	Leu	Val	Gly	Ser	Ala	Thr	Leu	Thr	Val	Met	Val	Ile	Asp
			20					25					30		
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
		35					40					45			
Ser	Glu	Asp	Ala	Leu	Leu	Gly	Ser	Glu	Ile	Ala	Gln	Val	Thr	Gly	Asn
	50					55					60				
Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65					70				75					80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
			85					90					95		
Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
		100						105				110			
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
		115					120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

130 135 140
 Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser
 145 150 155 160
 Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr
 165 170 175
 His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly
 180 185 190
 Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser
 195 200 205
 Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val
 210 215 220
 Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp
 225 230 235 240
 His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu
 245 250 255
 Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala
 260 265 270
 Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly
 275 280 285
 Asn Trp Gly Arg Val Phe Gln Leu Glu Pro Arg
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<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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 120
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 180
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 240
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 300
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 360
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<210> 3382

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3382

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Ala	Thr	Glu	Gln	Glu	Pro	Leu	Glu	Gly	Thr	Glu	Gln	Thr	Leu	Asp	Ala
			20					25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
			35				40					45			
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
			50			55					60				
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
65				70						75				80	
Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
			85					90						95	
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
			100				105						110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
			115				120					125			
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
			130			135					140				
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145				150						155				160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
			165					170						175	
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
			180				185						190		
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
			195				200					205			
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

210 215 220
 Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg
 225 230 235 240
 Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu
 245 250 255
 Leu Ala Arg Ile Phe Gly Ala Pro Pro Pro Ser Glu Ser Met Glu Gly
 260 265 270
 Pro Ser Leu Val Arg Asp Ser
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<210> 3383
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 3383
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 120
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 180
 ctgggagctg tcctgcccc gatctccac acaaacactc cagcatgaaa gagcgagact
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 300
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 309

<210> 3384
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3384
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 20 25 30
 Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala
 35 40 45
 Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
 50 55 60
 Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Phe Arg
 65 70 75 80
 Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
 85 90

<210> 3385
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3385

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 120
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<210> 3386

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3386

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Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg	20	25	30	
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe	35	40	45	
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met	50	55	60	
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala	65	70	75	80
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp	85	90	95	
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala	100	105	110	
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val	115	120	125	
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu	130	135	140	
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val	145	150	155	160
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala	165	170	175	
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180

185

<210> 3387

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 3387

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3299

<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser
			20					25					30	Ser
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp
			35					40					45	Ala
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val
	50					55					60			Pro
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly
	65				70					75				80
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala
				85					90					95
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val
			100					105					110	Gln
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile
		115					120					125		Thr
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val
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Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu						
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<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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gacgggcctc cgtttgtgga gccgctgctt aacttcactt ggttctctgt gctggctgtg
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gacggggaac cttctgacca gcctcatggg ctctctcagag caggaggatg gggaggagag
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cggtcgac
308

<210> 3390
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3390
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Leu Cys Leu Lys Asn Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr
20 25 30
Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro
35 40 45
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro
50 55 60
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu
65 70 75 80
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His
85 90 95
Val Glu Thr Pro Arg Ser
100

<210> 3391
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 3391
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180
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240
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 1080
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 1200
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 1295

<210> 3392

<211> 355

<212> PRT

<213> Homo sapiens

<400> 3392

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			20					25					30		
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe
	35						40					45			
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His
	50				55						60				
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys
65					70					75				80	
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr
			85						90					95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg
			100						105				110		
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn
	115						120					125			
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu
	130						135					140			
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr
145					150					155				160	
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu
			165						170					175	
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
			180						185				190		
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu
	195						200					205			
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn

210		215		220	
Gly Gly Phe Ser Gln Glu Gln Leu Asn Trp	Leu Asn Glu Val Leu Thr				
225		230		235	240
Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro					
	245		250		255
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg					
	260		265		270
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe					
	275		280		285
Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val					
	290		295		300
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln					
305		310		315	320
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly					
	325		330		335
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr Lys Lys Glu Arg Ala					
	340		345		350
Phe His Cys					
	355				

<210> 3393
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 3393
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 180
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<210> 3394
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 3394
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 Cys Arg Leu Gly Met Gly Pro Gly Xaa Val Thr Pro Ser Ser Phe Val

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Gly Val Trp	Ala Gly Ala Thr	Ala Ser Arg Gly Gly	Ser Asn Phe	Glu	
35		40		45	
Tyr Leu Lys	Arg Glu His Ser	Leu Ser Lys Pro Tyr	Gln Gly Val	Gly	
50		55		60	
Thr Gly Ser	Ser Ser Leu Trp	Asn Leu Met Gly	Asn Xaa Met	Val Met	
65		70		75	
Thr Gln Tyr	Ile Arg Leu Thr	Pro Asp Met Gln	Ser Lys Gln	Gly Ala	
	85		90		95
Leu Trp Asn	Arg Val Pro Cys	Phe Leu Arg Asp	Trp Glu Leu	Gln Val	
	100		105		110
His Phe Lys	Ile His Gly Gln	Gly Lys Lys Asn	Leu His Gly	Asp Gly	
	115		120		125
Leu Ala Ile	Trp Tyr Thr Lys	Asp Arg Met Gln	Pro Gly Pro	Val Phe	
	130		135		140
Gly Asn Met	Asp Lys Phe Val	Gly Leu Gly Val	Phe Val Asp	Thr Tyr	
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Pro Asn Glu	Glu Lys Gln Pro	Phe Thr Arg			
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<210> 3395

<211> 807

<212> DNA

<213> Homo sapiens

<400> 3395

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<210> 3396
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 <212> PRT
 <213> Homo sapiens

<400> 3396
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 35 40 45
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser
 50 55 60
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
 65 70 75 80
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
 85 90 95
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
 100 105 110
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
 115 120 125
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
 130 135 140
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
 145 150 155 160
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
 165 170 175
 Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser
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 Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu
 195 200 205

<210> 3397
 <211> 492
 <212> DNA
 <213> Homo sapiens

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<210> 3398
 <211> 163
 <212> PRT
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<400> 3398
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 Thr Leu Cys Ser Val Pro Ser Leu Glu Gln Gln Gln Pro Gly Xaa Ala
 35 40 45
 Ala Ser Ala Ile Pro Ser Trp Leu Leu Asn Asp Pro Gly Val Glu Xaa
 50 55 60
 Glu Val Met Gly Asp Ala Val Leu Glu Ala Ser His Asn Val Gln Gly
 65 70 75 80
 Cys Gly Cys Ser Trp Val Ser His Ser Gly Arg Gly Val Gly Pro Glu
 85 90 95
 Ala Glu Gly Ala Gly Ser Pro Gln Ser Leu Gly His Gly Ser Gly Gly
 100 105 110
 Trp Ala Ala Arg Arg Cys His Cys Leu Ser Val Ala Gly Val Ala Ala
 115 120 125
 Ala Ser Gly Cys Pro Arg Thr Glu Glu Ala Ala Trp Gly Glu Ile Leu
 130 135 140
 Arg Glu Gly Leu Ser Ser Pro Cys Ser Cys Ser Pro Gly Pro Pro Gly
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 Lys Leu Gly

<210> 3399
 <211> 5784
 <212> DNA
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4260
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4320
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4560
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4620
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4680
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4740
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4860
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4920
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4980
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5100
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5280

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 5340
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 5400
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 5460
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 5784

<210> 3400

<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

Thr	Gln	Ala	Met	Glu	Gly	Leu	Leu	His	Tyr	Ile	Asn	Pro	Ala	His	Ala
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Ile	Ser	Leu	Leu	Ser	Ala	Leu	Asn	Glu	Glu	Arg	Leu	Lys	Gly	Gln	Leu
		20					25					30			
Cys	Asp	Val	Leu	Leu	Ile	Val	Gly	Asp	Gln	Lys	Phe	Arg	Ala	His	Lys
	35					40					45				
Asn	Val	Leu	Ala	Ala	Ser	Ser	Glu	Tyr	Phe	Gln	Ser	Leu	Phe	Thr	Asn
	50				55					60					
Lys	Glu	Asn	Glu	Ser	Gln	Thr	Val	Phe	Gln	Leu	Asp	Phe	Cys	Glu	Pro
65			70					75						80	
Asp	Ala	Phe	Asp	Asn	Val	Leu	Asn	Tyr	Ile	Tyr	Ser	Ser	Ser	Leu	Phe
		85						90						95	
Val	Glu	Lys	Ser	Ser	Leu	Ala	Ala	Val	Gln	Glu	Leu	Gly	Tyr	Ser	Leu
		100					105						110		
Gly	Ile	Ser	Phe	Leu	Thr	Asn	Ile	Val	Ser	Lys	Thr	Pro	Gln	Ala	Pro
	115					120						125			
Phe	Pro	Thr	Cys	Pro	Asn	Arg	Lys	Lys	Val	Phe	Val	Glu	Asp	Asp	Glu
	130				135					140					
Asn	Ser	Ser	Gln	Lys	Arg	Ser	Val	Ile	Val	Cys	Gln	Ser	Arg	Asn	Glu
145			150					155						160	
Ala	Gln	Gly	Lys	Thr	Val	Ser	Gln	Asn	Gln	Pro	Asp	Val	Ser	His	Thr
		165					170							175	
Ser	Arg	Pro	Ser	Pro	Ser	Ile	Ala	Val	Lys	Ala	Asn	Thr	Asn	Lys	Pro
	180					185						190			
His	Val	Pro	Lys	Pro	Ile	Glu	Pro	Leu	His	Asn	Leu	Ser	Leu	Thr	Glu
	195					200						205			
Lys	Ser	Trp	Pro	Lys	Asp	Ser	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu
	210				215					220					
His	Ser	Gly	Ser	Leu	Asp	Asp	Pro	Asn	Arg	Ile	Ser	Leu	Val	Lys	Arg

2578

<210> 3401
<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401

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 120
 gaagtttata ctaggcttgg agaaatgaac aatgctgtga gaaacctcca agaactctta
 180
 gaattagata gttcatcctc attgtgtgtg ctagtaagca ctgttggaat actctgtagg
 240
 ctgattaatg aagatgtgaa tgagcagggt atgcagggtat taggacctga agacctccag
 300
 agcattatct acaaattgga agaacacgag gaatttttcc cagcatttca ggcatttact
 360
 aatgatctac ttgaaatctt agaaattgat gactctggat gccattgtac ctgcagtaaa
 420
 gaaattaaaa gtactttcat actgaaaaca aatcaaatca tttttactgt gtaaattgta
 480
 ttcttaacat tttgtatttt gtaggattga tcttattttg agacaagggt tgtaaaatgt
 540
 atttgctctc agaattcatc cccttcttag tattaggtc
 579

<210> 3402

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3402

Met	Pro	His	Phe	Gln	Thr	Leu	Gln	Ala	Ile	Val	Ser	His	Phe	Gln	Lys
1				5					10					15	
Leu	Phe	Asp	Val	Pro	Ser	Leu	Asn	Gly	Val	Tyr	Pro	Arg	Met	Asn	Glu
			20					25					30		
Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
		35					40					45			
Glu	Leu	Leu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
		50				55					60				
Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
		65			70				75				80		
Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
			85					90					95		
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100					105					110		
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
		115					120					125			
Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
		130				135						140			
Ile	Phe	Thr	Val												
145															

<210> 3403

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 3403

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120
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180
ctggaagagg gaaaagtga ggaacgaaga ccctttctgg cctcagaatg tactgaactg
240
cctaaagctg agaagtggag acgacagatc attggagaga tctctaaaaa agtggctcag
300
attcagaatg ctggtttagg tgaatttcga attcgtgacc tgaatgatga aattaacaag
360
ctgctaaggg agaaaggaca ctgggaggtc cggataaagg agctgggagg tcctgattat
420
ggaaaagtgt gccctaaaat gctggatcat gaaggaaaag aagtcccagg aaaccgaggt
480
tacaagtact ttggagcagc aaaagatttg cctggtgtta gagagctgtt tgaaaaanga
540
acctcttcct cctcccagnn aaagacacgt gctgagctca tgaaggcaat cgattttgag
600
tactatggtt acctagatga agatgatggt gttattgtgc ctttggaaca ggaatatgaa
660
aagaaaactca gagccgagtt agtggaaaag tggaaagcag agagagaggc tcggctggca
720
agaggagaaa aggaagagga ggaggaagag gaggaagaga tcaacatcta tgcagtcacc
780
gaggaggagt cggacgagga aggcagccag gagaaaggag gggacgacag ccagcagaag
840
ttcattgctc acgtccctgt tcctcgcag caagagattg aggaggcact ggtgcgaagg
900
aagaaaaatg aactcctcca gaagtatgca agcgagacct tgcaggccca aagtgaagaa
960
gccagaaggc tcctggggta ttaggaccca gctggggctc tccttgagat tcttccatcc
1020
cccagtggta cctcaggacc cagggctgca gacacaggct ggtgctgcaa gggctcctgc
1080
cccattctca gccttccttc cctctccttg tctcatgttg accggagggt aggggtctgt
1140
ccctggctct cctggtaggt tttgtacaca tattttgcta ctgtgtggat ccatttat
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1260
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1320
gcagacaaaa gtataatttt aaaaaatgca aattttctaa aagacacatc tcttgaaaaa
1380
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1440
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1500

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 1560
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 1680
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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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Gln	Ala	Gln	Leu	Glu	Glu	Gly	Lys	Val	Lys	Glu	Arg	Arg	Pro	Phe	Leu
		20					25						30		
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
	35						40					45			
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
	50					55					60				
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65				70					75					80	
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
			85					90						95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
		100					105						110		
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
	115					120						125			
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
	130					135					140				
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145				150					155					160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
			165					170						175	
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
		180					185						190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
	195					200						205			
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
	210				215					220					
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225				230					235					240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250						255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
		260					265						270		
Leu	Gln	Ala	Gln	Ser	Glu	Glu	Ala	Arg	Arg	Leu	Leu	Gly	Tyr		
	275					280						285			

<210> 3405

<211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

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 120
 aacctgctcg cctccatccg taagggaat gccattgacg aagcggacat cccgcgcga
 180
 gtggccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg
 240
 gcccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc
 300
 gccccagcct catctccagg cttggctaag cccagatgc cccaggtcc ctgcagccct
 360
 ccctctggcc cagttgcaga gccgccagcg cgactacaag ct
 402

<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

Gly	Trp	Glu	Ala	Pro	Leu	Gln	Glu	Arg	Leu	Ala	Phe	Tyr	Gln	Thr	Ala
1				5				10					15		
Ile	Glu	Ser	Ala	Arg	Gln	Ala	Gly	Asp	Ser	Ala	Lys	Met	Arg	Arg	Tyr
			20					25					30		
Asp	Arg	Gly	Leu	Lys	Thr	Leu	Glu	Asn	Leu	Leu	Ala	Ser	Ile	Arg	Lys
		35					40					45			
Gly	Asn	Ala	Ile	Asp	Glu	Ala	Asp	Ile	Pro	Pro	Pro	Val	Ala	Ile	Gly
	50				55						60				
Lys	Gly	Pro	Ala	Ser	Thr	Pro	Thr	Tyr	Ser	Pro	Ala	Pro	Thr	Gln	Pro
65					70					75				80	
Ala	Pro	Arg	Ile	Ala	Ser	Ala	Pro	Glu	Pro	Arg	Val	Thr	Leu	Glu	Gly
			85					90					95		
Pro	Ser	Ala	Thr	Ala	Pro	Ala	Ser	Ser	Pro	Gly	Leu	Ala	Lys	Pro	Gln
			100				105					110			
Met	Pro	Pro	Gly	Pro	Cys	Ser	Pro	Pro	Ser	Gly	Pro	Val	Ala	Glu	Pro
		115					120					125			
Pro	Ala	Arg	Leu	Gln	Ala										
			130												

<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

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 120

gggacctttc ccggacaccc aacctctctg gtggcgaggc aggtggcggc accgacaggc
 180
 ccggcgggga cctttcccg ancacctggc ctctctggca agcaggtggc ggcaccaaca
 240
 ggcccggggg ggacctttcc cggacacctg gcctctctcg cgaggcaggt ggcagaactg
 300
 gttccacgtc tgatcttctc tagacaaacc tgccttcaga ggaaattgtg ttcaactgga
 360
 gaaactggaa aatgtactag atattggctg atatgaagga tatatgtttt aagtatgata
 420
 attcgatttt ggctctgtag ggaaaggctc ttattttaaa aagatgtgca ctagagaaaa
 480
 aggaaacagc atgtagcaaa tacatccacg gatgtctctc tggtttaaaa aaaaa
 535

<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

Gly	Met	Arg	Gly	Asp	Gly	Glu	Glu	Pro	Pro	Arg	Thr	Ala	Pro	Ser	Arg
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Ser	Ala	Gly	Thr	Phe	Pro	Gly	His	His	Ala	Phe	Ser	Ala	Val	Arg	Gln
			20				25					30			
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
			35			40					45				
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
	50				55					60					
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
				85				90					95		
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105					110			
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
		115				120					125				
Trp	Leu	Ile													
		130													

<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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 120
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 180
 cctcggccca gcgcggcccg caccgccatg gaggtgctgg agagcgggga gcagggcgctg
 240

ctgcagtggg accgcaagct gagcgagctg tcagagcccc gggacggcga ggccctcatg
 300
 taccacacgc acttctcaga acttctggat gagttttccc agaactctt gggtcagctc
 360
 ctgaatgatc ctttctcttc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg
 420
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcgggcc
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 600
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 660
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 720
 cagaccatta ttctaaaat taagctggag cctcatgaag tggatcagtt tctaaacttc
 780
 tctcctaaag aaggtctgtc tngccctccc tgtgtccctt tgggttatgg atatggtctc
 840
 tgggtctaca gagagggaa atggcgagag agctgggatg agtttgtacc acagatgttg
 900
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 959

<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

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Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
		35					40					45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
	50				55						60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
65				70					75					80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
			85					90					95		
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
		100					105					110			
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
	115					120					125				
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
	130					135						140			

<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

<400> 3411

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 120
 cgacggcctc cacagtccgg agcccggcgg agcccggacc tggcggggag agctgcctcc
 180
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 240
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 300
 aactcacttc tgtcctcctc ccagtcgcgc cggcgggtgac catctcggct cttttgggct
 360
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 420
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 480
 agctgcttct tgaactggac cgtggggaaa ctaaaaacgc atctatctaa cgtttaccct
 540
 agcaaaccat tgacgaagga tcagagattg gtgtattcgg gcagactgct tcccgatcat
 600
 ctgcagctga aagacattct cagaaaacaa gatgagtatc atatggttca tctagtatgt
 660
 acttctcgga ctctccctcag ttctccaaaa tccagcacca atagagaaag tcatgaagca
 720
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 780
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 840
 ccacaagcac aaactgacca agcacagagt caccagtttc catatgtaat gcaaggaaat
 900
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 958

<210> 3412

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3412

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<212> DNA
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<212> PRT

<213> Homo sapiens

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Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

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 2040
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 2460
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 2820
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<210> 3422

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

Met Ser Arg His Leu Pro Trp Ile Cys Asp Gln Arg Cys Ser Ser Pro
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<210>	3423
<211>	1851

<212> DNA

<213> Homo sapiens

<400> 3423

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120
cgttcattgg ccgtggcctc tctagctcgg cccctaggg gggctgaccc cgtaaccagt
180
gaggcgccgg ccaacctagt gcgacgtgtg ggcgtggcgg gggctgggggt ctgccccgga
240
agggtgtagc ccattggagg tccccggagc gaagtccagc tgccgttagg cgctgggata
300
gtcgcacgct ggatgcatct acgtccgccg agcccctggg gcgaagaggc cgcgtccgcc
360
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480
ccggagaccc tcgggccgtg tccatttgtg ggcaaagcca gggggcagg cttggccaga
540
gtgcaccact cggcgccgtc ccaggccga cgctctgggc gcgcccgaa cccaggtta
600
atctggagtg gccctggag tcagtttctt acaccatccg agggccacc cagcacgagc
660
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720
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780
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840
aagcctccac actcaagggc cctccacctg aggcagatct tcctaggagc cctggaaact
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960
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1260
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1320
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1380
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1440
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1680
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1740
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1851

<210> 3424

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3424

Met	Leu	Trp	Pro	Gln	Val	Phe	Ser	Glu	Leu	Gly	Phe	Pro	Pro	Ala	Val
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Gln	Arg	Trp	Val	Ile	Gly	Arg	Cys	Leu	Cys	Val	Pro	Glu	Arg	Ser	Leu
			20					25					30		
Ala	Ser	Tyr	Gly	Val	Arg	Gln	Asp	Gly	Asp	Pro	Ala	Phe	Leu	Tyr	Leu
			35				40					45			
Leu	Ser	Ala	Pro	Arg	Glu	Ala	Pro	Ala	Thr	Gly	Pro	Ser	Pro	Gln	His
	50					55					60				
Pro	Gln	Lys	Met	Asp	Gly	Glu	Leu	Gly	Arg	Leu	Phe	Pro	Pro	Ser	Leu
65				70					75					80	
Gly	Leu	Pro	Pro	Gly	Pro	Gln	Pro	Ala	Ala	Ser	Ser	Leu	Pro	Ser	Pro
				85					90					95	
Leu	Gln	Pro	Ser	Trp	Ser	Cys	Pro	Ser	Cys	Thr	Phe	Ile	Asn	Ala	Pro
			100					105					110		
Asp	Arg	Pro	Gly	Cys	Glu	Met	Cys	Ser	Thr	Gln	Arg	Pro	Cys	Thr	Trp
		115					120						125		
Asp	Pro	Leu	Ala	Ala	Ala	Ser	Thr								
		130					135								

<210> 3425

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 3425

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120
gaggaggaag tgaggccgcg cggaaggaag gcggcgagcc ccggggcccc gaggccttgg
180
ccgcgtcaca gcaccacat ggctcttggg gtgggcgcgg ccttcgagga actgcctcac
240
gacggcacgt gtgacgagtg cgagcccgcg gaggtccgg gggccgagga agtgtgccga
300

gaatgaggct tctgctactg ccgcccgcac gccgaggcgc acaggcagaa gttcctcagt
 360
 caccatctgg ccgaatacgt ccacggctcc caggcctgga ccccgccagc tgacggagag
 420
 ggggaggga aggaagaagc ggaggtaag gtggagcagg agaggagat agaaagcgag
 480
 gcagggaag agagtgagtc ggaggaagag agcgagtcag aggaagagag cgagacagag
 540
 gaagagagtg aggatgagag cgatgaggag agtgaagaag acagcgagga agaaatggag
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 660
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 720
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 840
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 960
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 1020
 cagaaggccc ttcatttagt ggacatccaa gaggaatgg ccacagctca tgtgactgag
 1080
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 1200
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 1260
 cccctcccct tgtgtgtatg tgacagcgtg tatgtaacgg cttctgattt ctgtgaaagc
 1320
 tgctcagcaa caaacgtact tccaccagat gtgtccccag atccacagca ggcacatatc
 1380
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 1416

<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

Ser Gly Gly Lys Gly Leu Cys Cys Cys Ala Arg Ala Gly Ala Ala Ala
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 Ala Pro Gly Pro Ala Ser Arg Arg Gly Ala Val Gln Ala Gly Gly Asp
 20 25 30
 Ser Leu Gly Arg Asp Pro Gly Arg Glu Glu Glu Val Arg Pro Arg Gly
 35 40 45
 Arg Lys Ala Ala Ser Pro Gly Ala Pro Arg Pro Trp Pro Arg His Ser
 50 55 60
 Thr His Met Ala Ser Gly Val Gly Ala Ala Phe Glu Glu Leu Pro His

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<210> 3427
<211> 580
<212> DNA
<213> Homo sapiens
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<400> 3427
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60
ccggatttca atgtcatagt tcccattgtc aatgacatca tcggagaact tgacctgctg
120
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gggctctggat tgagacttgg accttctgag cactggcaga tgtactggct tctcttcagg
 180
 caggattttc tctggacaca actctgaact tagactcttt aaggactctg cactcctgtg
 240
 cagcatggaa gagttcaaag ttcccatatt gctcatcttc tcacaatctt ctgtttccat
 300
 ctcttcaaaa ttttgcagag aatacaatga tggccttggc ttgttttctc catccaccga
 360
 agccctgtg atattggaca atgccaaaga atccatcgaa tcccgaacac tttgctctgg
 420
 tttcagggtct gacagacact ccagggaatc ttcataccac tgtgtttcat catgattata
 480
 ccctgaagcc ccatgggtcca gttccaattc ctgaagcctt ctactgcttg cagggcctgg
 540
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 580

<210> 3428

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
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Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
		35					40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
		50				55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70					75				80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90					95		
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
		100					105					110			
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
		115					120					125			
Glu	Arg	Gly	Ser												
		130													

<210> 3429

<211> 634

<212> DNA

<213> Homo sapiens

<400> 3429

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 120
 gtcagcttcc ttttcatact ttcccggcgt tctctccacg agcaggtgca ccagggaact
 180

gtccctctgt cctacacggt caccacagtg acgaccaag gcttccccctt gcctacaggg
 240
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 300
 cagcattacc cctctgctg cctcccgccc ccgcttatcc aggcgtgcac catgcagcag
 360
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 420
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 480
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<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

Phe	Leu	Leu	Arg	Val	Ala	Leu	Ala	Val	Ser	Phe	Leu	Phe	Ile	Leu	Ser
1				5				10					15		
Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35					40					45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50					55				60					
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75				80	
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
				85				90					95		
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
			100					105					110		
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
		115					120								

<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 120
 ctgcgtggga gcagcgtccc aatgccagcg cgtcacgtcg ccagcgtgc cctagcacgc
 180
 agcgccgcca gccgtgtgc caacagtacc aaatcgtcgt gcagcggctt cgcgccgccc
 240

gacttcaacc attgcctcaa ggattgggac tataatggcc ttctgtgct caccaccaac
 300
 gccatcgccc agtgggatct ggtgtgtgac ctgggctggc aggtgaccc ggagcagatc
 360
 ctcttcatct tgggctttgc ctccggctac ctgttctctg gttaccccg agacagattt
 420
 ggccgtcgcg ggattgtgct gctgaccttg gggctgggtg gccctgttg agtaggaggg
 480
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 540
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 600
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 660
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 720
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 780
 aagcggcaga ttgaggaggc tcagtctgtg ctgaggatcc tggctgagcg aaaccggccc
 840
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 aaaaatctgc ttatctggg cttaccaac ttcattgcc atgccattcg cactgctac
 1020
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 1200
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 1260
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 1380
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 1396

<210> 3432

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3432

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 20 25 30
 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
 35 40 45
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50	55	60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly		
65	70	75
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu		80
	85	90
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
	130	135
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
	145	150
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		155
	165	170
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		175
	180	185
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		190
	195	200
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		205
	210	215
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		220
	225	230
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		235
	245	250
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		255
	260	265
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val		270
	275	280
Arg Gly Arg Gly Leu Gly Leu Ile		285
	290	295

<210> 3433

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 3433

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120

ccgagccact cccgttccca caccaggctc aacttgaaaa gggacgtcgc ccacctgtac
180

cgaggagtcg gctcgcgcta catcatgggg tcaggagaat ctttcattga gctgcagcag
240

cgctctctga gagagaagga ggccaagatc aggaaggcct tggacaggct tcgcaagaag
300

aggcacctgc tccgccggca gcggacgagg cgggagttcc ccgtgatctc cgtgggtggg
360

tacaccaact gcggtgagca cgcgccagg ggaggggcct tccgcggtct ccgtgtcacc
420

ggtgaggact cgcgcggggg agggcagggg gtccctgtcg tctcagtggt gccgtacgac
480

agctgcggtg agcacgtgcc caggagaggg ggttcccatg gtcgcggtgt ggggtacacc
 540
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 600
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 660
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 720
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 780
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 840
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 960
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 1020
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 1080
 ccaccacccc acctacacca tcccaccatc tacgccattg ccaaattctac acagacgacc
 1140
 tcactcccat ccacgccttc acacgcacac ccgtccacac caccatctcc cccgtgtccg
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<210> 3434

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

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Arg	Pro	Ser	Ser	Val	Pro	Pro	Ser	Pro	Ser	Pro	Arg	Pro	Leu	Pro	Gly
			20					25					30		
Gly	Arg	Gln	Arg	Pro	Gln	Arg	Pro	Ser	His	Ser	Arg	Ser	His	Thr	Arg
		35					40					45			
Ser	Asn	Leu	Lys	Arg	Asp	Val	Ala	His	Leu	Tyr	Arg	Gly	Val	Gly	Ser
	50				55					60					
Arg	Tyr	Ile	Met	Gly	Ser	Gly	Glu	Ser	Phe	Met	Gln	Leu	Gln	Gln	Arg
65				70					75				80		
Leu	Leu	Arg	Glu	Lys	Glu	Ala	Lys	Ile	Arg	Lys	Ala	Leu	Asp	Arg	Leu
			85					90					95		
Arg	Lys	Lys	Arg	His	Leu	Leu	Arg	Arg	Gln	Arg	Thr	Arg	Arg	Glu	Phe
			100					105					110		
Pro	Val	Ile	Ser	Val	Val	Gly	Tyr	Thr	Asn	Cys	Gly	Glu	His	Ala	Pro
		115					120					125			
Arg	Gly	Gly	Ala	Phe	Arg	Gly	Leu	Arg	Val	Thr	Gly	Glu	Asp	Ser	Pro
	130					135					140				
Gly	Gly	Gly	Gln	Gly	Val	Pro	Val	Val	Ser	Val	Val	Pro	Tyr	Asp	Ser
145				150					155					160	
Cys	Gly	Glu	His	Val	Pro	Arg	Arg	Gly	Gly	Ser	His	Gly	Arg	Arg	Val

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<210> 3435
<211> 1225
<212> DNA
<213> Homo sapiens
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<400> 3435
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180
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240
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300
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360
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420
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480
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540
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660
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720
gactctgaga gcagcaagcc cagcttcatg ccacgcctat acatcaaccg ccgtcttgcc
780
atggaacacc gtgcctgccc ctctcgagac cctgcctgca agaatgcagt cttcaccacg
840

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gtatatgaag gcctcaagcc ctctgacaaa tatgaaaagc ccctgggacta caggtggccc
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 960
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 1020
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 1080
 gctcggggaca tgtatgtacc caaccctcc tgccgagact ttgccaagta tgaatggatc
 1140
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 1225

<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

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 20 25 30
 Glu Phe Asn Val Ser Cys Leu Thr Asp Ser Asn Ala Asp Thr Tyr Trp
 35 40 45
 Glu Ser Asp Gly Ser Gln Cys Gln His Trp Val Arg Leu Thr Met Lys
 50 55 60
 Lys Gly Thr Ile Val Lys Lys Leu Leu Leu Ala Val Asp Thr Thr Asp
 65 70 75 80
 Asp Asn Phe Met Pro Lys Arg Val Val Val Tyr Gly Gly Glu Gly Asp
 85 90 95
 Asn Leu Lys Lys Leu Ser Asp Val Ser Ile Asp Xaa Arg Pro Ser Ser
 100 105 110
 Gly Xaa Val Cys Val Leu Glu Asp Met Thr Val His Leu Pro Ile Ile
 115 120 125
 Glu Ile Arg Ile Val Glu Cys Arg Asp Asp Gly Ile Asp Val Arg Leu
 130 135 140
 Arg Gly Val Lys Ile Lys Ser Ser Arg Gln Arg Glu Leu Gly Leu Asn
 145 150 155 160
 Ala Asp Leu Phe Gln Pro Thr Ser Leu Val Arg Tyr Pro Arg Leu Glu
 165 170 175
 Gly Thr Asp Pro Glu Val Leu Tyr Arg Arg Ala Val Leu Leu Gln Arg
 180 185 190
 Phe Ile Lys Ile Leu Asp Ser Val Leu His His Leu Val Pro Ala Trp
 195 200 205
 Asp His Thr Leu Gly Thr Phe Ser Glu Ile Lys Gln Val Lys Gln Phe
 210 215 220
 Leu Leu Leu Ser Arg Gln Arg Pro Gly Leu Val Ala Gln Cys Leu Arg
 225 230 235 240
 Asp Ser Glu Ser Ser Lys Pro Ser Phe Met Pro Arg Leu Tyr Ile Asn
 245 250 255
 Arg Arg Leu Ala Met Glu His Arg Ala Cys Pro Ser Arg Asp Pro Ala

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<210> 3437
<211> 2081
<212> DNA
<213> Homo sapiens
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180
tgagcgtgcc agttcctgtg cacacaagcg ctcagcatcc tggggcagca cagaccacg
240
aaaaagagatt tccaagttga agcaacaact gcagaggacg aagctgagcc gcagtgggaa
300
agagaaggag cgaggttcac cactcctagg ggaccacgca gtgcggggag cactgagggc
360
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420
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480
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540
tggcagctgt gatcatcccc tcctcctcct gagcctggca accttgccag ctctccttcc
600
atgtccttgg catctcccca gcctgtggcc tggccagtca tgaggaacat cgggggtgccg
660
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720
ttgaagatgg cagcccatct ccagtccttg cctttgctgc ctccccctga cctaataata
780
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840

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 960
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 1020
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 1080
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 1200
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 1320
 cgtgatggga cctgccttct ccactagtag ctgggcagct cacaattcac acctgtgtac
 1380
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 1440
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 1500
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 1560
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 1620
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 1680
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 1740
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 1800
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 1860
 atttttcttg tatcgatgta gagactctat tttctcccaa agacactatt tttgcagctg
 1920
 tttgaagttt gtatattttc cgtactgcag agcttacaca aaattgaaga atgttaatgt
 1980
 tcgagtttct ttatcttggtg tttagagggt gttttttgca gatcttggtg ttaatagacc
 2040
 aaataaataa ataatattc ccagcaaaaa aaaaaaaaaa a
 2081

<210> 3438

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3438

Ala Cys Gln Phe Leu Cys Thr Gln Ala Leu Ser Ile Leu Gly Gln His
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 20 25 30
 Glu Ala Glu Pro Gln Trp Glu Arg Glu Gly Ala Arg Phe Thr Thr Pro

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<210> 3439
<211> 1519
<212> DNA
<213> Homo sapiens
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2612

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 1260
 atgttagtgt gagccccag cccctgccc gccgccccct cccagggcc ctgcctctc
 1320
 cccacccccct cgtcagccag cgttgctgtt ccttgagag aaaaggattg tgggaaactc
 1380
 caggactctt cccaccgcct cccagcgcct gctgctggg gctgcctgca tgcctcccc
 1440
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 1500
 tccaaaccaa aaaaaaaaaa
 1519

<210> 3440

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

Cys	Ala	Pro	Pro	Pro	Ile	Pro	Leu	Leu	His	Pro	Pro	Thr	Ser	Leu	Thr
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Leu	Ser	Pro	Cys	Ser	Pro	Val	Ser	Arg	Pro	Pro	Arg	Ala	Ser	Thr	Ala
			20					25					30		
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg	His
			35					40				45			
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
			50				55				60				
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln	Pro
65					70				75					80	
Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
				85					90					95	
Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro	Trp
			100					105					110		
Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg	Thr
			115				120					125			
Pro	Trp	Gly	Gly	Gly	Glu	Asp	Val	Ser	Ala	Gly	Pro	Leu	Xaa	Thr	Pro
			130				135				140				
Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser	Ala
145					150					155				160	
Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala	Ala
				165					170					175	
His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly	Ser
			180					185					190		
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln	Pro
			195				200					205			
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp	Arg
			210				215				220				
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Leu	Gly
225					230					235				240	
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
				245					250					255	
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

	260		265		270									
Arg	Ser	Asn	Leu	Val	Pro	Gly	Ala	Ala	Gly	Leu	Cys	Met	Leu	Val
	275		280		285									

<210> 3441

<211> 2074

<212> DNA

<213> Homo sapiens

<400> 3441

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180
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240
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300
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360
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420
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480
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540
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600
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720
gacagccagg tcttcaagga gcccaagatg gaggtagagc tcattaccag gttcctccc
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840
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960
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1260
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1320

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cccagcccgg cacaggctgc ggagacgccg gccctggagc tgcccctccc cagcgtgccc
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 2040
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 2074

<210> 3442

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3442

Met Val Gly Lys Asn Val Lys Leu Tyr Asp Met Val Leu Gln Phe Leu
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 Ala Glu Leu Leu Met Ser Leu His Asp Leu Asp Val Gly Glu Ile Cys
 35 40 45
 Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile
 50 55 60
 Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe
 65 70 75 80
 Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser
 85 90 95
 Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr
 100 105 110
 Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp
 115 120 125
 Ser Pro Asp Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly
 130 135 140
 Ala Trp Asp Met Ile Asp Ser Gln Val Phe Lys Glu Pro Lys Met Glu
 145 150 155 160
 Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu Met Ser Phe Leu Val

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<210> 3443
<211> 2070
<212> DNA
<213> Homo sapiens
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600

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720
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960
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1020
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1080
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1140
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2040
aaaaaaaaa aaaaaaaaaa aaaaaagggg
2070

<210> 3444

<211> 579

<212> PRT

<213> Homo sapiens

<400> 3444

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 20 25 30
 Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
 35 40 45
 Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
 50 55 60
 Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
 65 70 75 80
 Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
 85 90 95
 Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
 100 105 110
 Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
 115 120 125
 Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
 130 135 140
 Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
 145 150 155 160
 Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
 165 170 175
 Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
 180 185 190
 Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
 195 200 205
 Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
 210 215 220
 Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
 225 230 235 240
 Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
 245 250 255
 Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
 260 265 270
 Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
 275 280 285
 Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
 290 295 300
 Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
 305 310 315 320
 Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
 325 330 335
 Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
 340 345 350
 Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
 355 360 365
 Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
 370 375 380
 Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
 385 390 395 400
 Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

405 410 415
 His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val
 420 425 430
 Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala
 435 440 445
 Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr
 450 455 460
 Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu
 465 470 475 480
 Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu
 485 490 495
 Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln
 500 505 510
 Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys
 515 520 525
 Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp
 530 535 540
 Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr
 545 550 555 560
 Asp Thr Trp Ile His Asp Phe Met Ser Glu Tyr Leu Ile Glu Leu Ser
 565 570 575
 Lys Val Asn

<210> 3445

<211> 2086

<212> DNA

<213> Homo sapiens

<400> 3445

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 180
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<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

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Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr			
35	40	45	
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro			
50	55	60	
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln			
65	70	75	80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr			
85	90	95	
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly			
100	105	110	
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys			
115	120	125	
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp			
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Pro Ala Ser Gln Asn Asn Leu Arg His			
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<210> 3447

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3447

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<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
		20					25						30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
	35					40					45				
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
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Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65				70					75					80	
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
			85					90						95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
	100						105						110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
	115						120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145				150					155					160	
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
			165					170					175		
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
		180					185						190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
	195						200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
	210					215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225				230					235					240	
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245					250					255		
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260					265					270			
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
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Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
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<210> 3449

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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<210> 3450

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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 20           25           30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
 35           40           45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
 50           55           60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
 65           70           75           80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
 85           90           95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

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100	105	110
Leu Ala His Asn Ala Pro Val Lys Val Lys Asn Ala Gln Gly Trp Ser		
115	120	125
Pro Leu Ala Glu Ala Ile Ser Tyr Gly Asp Arg Gln Met Ile Thr Ala		
130	135	140
Leu Leu Arg Lys Leu Lys Gln Gln Ser Arg Glu Ser Val Glu Glu Lys		
145	150	155
Arg Pro Arg Leu Leu Lys Ala Leu Lys Glu Leu Gly Asp Phe Tyr Leu		
165	170	175
Glu Leu His Trp Asp Phe Gln Ser Trp Val Pro Leu Leu Ser Arg Ile		
180	185	190
Leu Pro Ser Asp Ala Cys Lys Ile Tyr Lys Gln Gly Ile Asn Ile Arg		
195	200	205
Leu Asp Thr Thr Leu Ile Asp Phe Thr Asp Met Lys Cys Gln Arg Gly		
210	215	220
Asp Leu Ser Phe Ile Phe Asn Gly Asp Ala Ala Pro Ser Glu Ser Phe		
225	230	235
Val Val Leu Asp Asn Glu Gln Lys Val Tyr Gln Arg Ile His His Glu		
245	250	255
Ala His Ile Pro Gly Ile Arg Asp Gly Asn Arg Arg Arg Gly Gly Tyr		
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Phe Asn Glu Gln		
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<210> 3451

<211> 595

<212> DNA

<213> Homo sapiens

<400> 3451

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<210> 3452

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3452

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35 40 45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
50 55 60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
65 70 75 80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
85 90 95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
100 105 110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
115 120 125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
130 135 140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145 150 155 160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
165 170 175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
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<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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<211> 159

<212> PRT

<213> Homo sapiens

<400> 3454

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 Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly
 35 40 45
 Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile
 50 55 60
 Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu
 65 70 75 80
 Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val
 85 90 95
 Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys
 100 105 110
 Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu
 115 120 125
 Leu Leu Pro Asn Gly Leu Arg Glu Ser Ile Ser Lys Val Arg Ser Ser
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<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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 4080
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 4140
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 4260
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<210> 3456

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3456

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Lys	Lys	Gln	Arg	Arg	Gly	Arg	Lys	Glu	Gly	Glu	Glu	Asp	Gln	Asn	
			20				25					30			
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
		50				55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70					75				80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
			85					90					95		
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
			100					105					110		
Val	Ile	Phe	Pro	Gln											

115

<210> 3457
 <211> 646
 <212> DNA
 <213> Homo sapiens

<400> 3457
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 120
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 180
 aagtgaggat gcgtatgttn ggttggtgtgt gtctgtatct gcatttgcac gngtgtattg
 240
 gagattggag ctgtgtgtct gtgcgtgtgt gtagtgtgta ccgtgtgcac atgtatgtgt
 300
 gtgcctgtgg accagcacct gtgttgccac atttgggtga cggtagatcc atgcactnng
 360
 gtctgcaggt gtatttgaga gtgcgtgtgt ctgtctaaca cactctgtag atgtcgccgc
 420
 ctgaatgaga gccagagcag agctctcccc agccctcccc aagtactgtt cccctctacc
 480
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 540
 aaccctccag gccttctect gccacaggct ctgtctctgt cccgtcgtgt tgcctctctg
 600
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 646

<210> 3458
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 3458
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 Arg Cys Val Xaa Val Pro Gly Cys Val Cys Ala Cys Val Cys Val Asp
 20 25 30
 Ile Cys Ala Cys Leu Phe Thr His Arg Trp Glu Cys Arg Val Cys Ile
 35 40 45
 Leu Cys Xaa Cys Thr Cys Thr Gln Ala Xaa Ala Gly Lys
 50 55 60

<210> 3459
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 3459
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 120
 gaccctactt cactgcaggg ggtcagccc agtctgcctc aggcagaaca agggctctggg
 180
 ggtggctgtg gggggctgtg gatgggtccc agtgggcctg ctgccactcc caccacatgg
 240
 gacctgcctt ccggccctgc caggattcca gtctgcctc gtcacccca gcttcaggc
 300
 ccttccctgt gtgcagctc agtttgctg ctgcagaata agcaccacgc tcctcgtgg
 360
 gcagaggcac cggcagactc accacgcgcc ctgcaggcat gtctgtgct gtgccaggca
 420
 ggccccggcc acgtccctgc ccccgagct ggccttcagc ggggacagtg gtcagcactg
 480
 aagacagtca tacctgcccg gccggcactg cctgtctcag cagggggaca atttgaactt
 540
 aagctttaac ttaattaaaa tgaactaaaa ttaaaaaaaaa aaaaaaaaaa aa
 592

<210> 3460

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3460

Met	Gly	Pro	Ser	Gly	Pro	Ala	Ala	Thr	Pro	Thr	Thr	Trp	Asp	Leu	Pro
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Ser	Gly	Pro	Ala	Arg	Ile	Pro	Val	Leu	Pro	Cys	Ser	Pro	Gln	Leu	Pro
			20				25					30			
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
			35				40					45			
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
			50			55				60					
Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
65				70					75				80		
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
			85					90				95			
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
			100				105					110			
Leu	Lys	Leu													
			115												

<210> 3461

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3461

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 120
 agctttgcgt ccgtggcaga tgtcagctcc agtcgcagcc gcacctccg gatggccctg
 180

ctggaagcca gcatcggggt ggctgggatg ctggcaagcc tcctcggggg ccaactggctc
 240
 cgggcccagg gttatgccaa ccccttctgg ctggccttgg ccttgctgat agccatgact
 300
 ctctatgcag ctttctgctt tggtagagacc ttaaaggagc caaagtcac ccggctcttc
 360
 acgttccgtc accaccgatc cattgtccag ctctatgtgg ctcccgcccc agagaagtcc
 420
 aggaaacatt tagccctcta ctcaactggc atcttcgtgg tgatcactgt gcac
 474

<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

Met	Ala	Leu	Leu	Glu	Ala	Ser	Ile	Gly	Val	Ala	Gly	Met	Leu	Ala	Ser
1			5					10				15			
Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
		20					25					30			
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
	35					40					45				
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
	50					55				60					
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70				75					80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
			85					90						95	
Val	Ile	Thr	Val	His											
			100												

<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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 120
 cagcagcggc agggcaagca ccctcctaata tatctcatgg ctaatgaacg catgaacctc
 180
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 240
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 300
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 360
 ctagaactgg tagaaaagct tgttccagaa gccgcagaga taacagcaag tgtaaagat
 420
 cttccaggac ttaagacacc agtaggtaga ggaagagcct ggcttcgttt ggcattaatg
 480

caaaagaaac tttcagaata tatgaaagct ttgatcaata agaaagaact tctcagtga
 540
 ttctacgaac ccaatgccct catgatggaa gaagaaggag ccataattgc tggctctgtg
 600
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 660
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 720
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 780
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 960
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 1320
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 1620
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 1734

<210> 3464

<211> 434

<212> PRT

<213> Homo sapiens

<400> 3464

Xaa Arg Arg Arg Leu Arg Ser Ala Pro Ala Ala Ala Ala Ala Leu
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 Leu Glu Asp Pro Ala Val Pro Arg Leu Thr Ala Ala Leu Pro Ala Ala
 20 25 30
 Glu Leu Pro Glu Arg Arg Arg Arg Gln Gln Arg Gln Gly Lys His His

35	40	45
Pro Asn Tyr Leu Met Ala	Asn Glu Arg Met Asn Leu Met Asn Met Ala	
50	55	60
Lys Leu Ser Ile Lys Gly Leu Ile Glu Ser Ala Leu Asn Leu Gly Arg		
65	70	75
Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met		
85	90	95
Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly		
100	105	110
Gln Asn Lys Ser Phe Trp Gly Pro Leu Glu Leu Val Glu Lys Leu Val		
115	120	125
Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu		
130	135	140
Lys Thr Pro Val Gly Arg Gly Arg Ala Trp Leu Arg Leu Ala Leu Met		
145	150	155
Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu		
165	170	175
Leu Leu Ser Glu Phe Tyr Glu Pro Asn Ala Leu Met Met Glu Glu Glu		
180	185	190
Gly Ala Ile Ile Ala Gly Leu Leu Val Gly Leu Asn Val Ile Asp Ala		
195	200	205
Asn Phe Cys Met Lys Gly Glu Asp Leu Asp Ser Gln Val Gly Val Ile		
210	215	220
Asp Phe Ser Met Tyr Leu Lys Asp Gly Asn Ser Ser Lys Gly Thr Glu		
225	230	235
Gly Asp Gly Gln Ile Thr Ala Ile Leu Asp Gln Lys Asn Tyr Val Glu		
245	250	255
Glu Leu Asn Arg His Leu Asn Ala Thr Val Asn Asn Leu Gln Ala Lys		
260	265	270
Val Asp Ala Leu Glu Lys Ser Asn Thr Lys Leu Thr Glu Glu Leu Ala		
275	280	285
Val Ala Asn Asn Arg Ile Ile Thr Leu Gln Glu Glu Met Glu Arg Val		
290	295	300
Lys Glu Glu Ser Ser Tyr Ile Leu Glu Ser Asn Arg Lys Gly Pro Lys		
305	310	315
Gln Asp Arg Thr Ala Glu Gly Gln Ala Leu Ser Glu Ala Arg Lys His		
325	330	335
Leu Lys Glu Glu Thr Gln Leu Arg Leu Asp Val Glu Lys Glu Leu Glu		
340	345	350
Met Gln Ile Ser Met Arg Gln Glu Met Glu Leu Ala Met Lys Met Leu		
355	360	365
Glu Lys Asp Val Cys Glu Lys Gln Asp Ala Leu Val Ser Leu Arg Gln		
370	375	380
Gln Leu Asp Asp Leu Arg Ala Leu Lys His Glu Leu Ala Phe Lys Leu		
385	390	395
Gln Ser Ser Asp Leu Gly Val Lys Gln Lys Ser Glu Leu Asn Ser Arg		
405	410	415
Leu Glu Glu Lys Thr Asn Gln Met Ala Ala Thr Ile Lys Gln Leu Glu		
420	425	430
Gln Arg		

<210> 3465

<211> 2904

<212> DNA

<213> Homo sapiens

<400> 3465

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120
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180
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240
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300
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360
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660
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720
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780
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840
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1980
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2880
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2904

<210> 3466

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3466

Thr Arg Pro Pro Glu Arg Ala Met Asp Ala Leu Lys Ser Ala Gly Arg
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 20 25 30
 Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
 35 40 45
 Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
 50 55 60
 Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
 65 70 75 80
 Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
 85 90 95
 Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
 100 105 110
 Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
 115 120 125
 Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
 130 135 140
 Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
 145 150 155 160
 Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
 165 170 175
 Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
 180 185 190
 Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
 195 200 205
 Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
 210 215 220
 Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
 225 230 235 240
 Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
 245 250 255
 Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
 260 265 270
 Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
 275 280 285
 His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
 290 295 300
 Ser Gly Thr Glu Gln Asp Asp Leu Phe Ser Phe
 305 310 315

<210> 3467

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3467

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 ggtctgaggt gaaggtccta ggagcatcag ttctctgttg ggatcaaggt tgctgggaca
 180

gagcttgatc cctgtcaact gctaaaacaa tccaggacaa tccaatagta gagctgaatt
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 360
 agccaaaact gaaagtcatt taaccgggac atgcacaaaag gagggaaaatc ataactcgga
 420
 accaacgttt cctccctgtg gagccaagaa gacagggaca tgaccggagc ttgagggggc
 480
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 540
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 600
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 638

<210> 3468

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3468

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Tyr	Asp	Phe	Pro	Pro	Leu	Cys	Met	Ser	Gly	Leu	His	Asp	Phe	Gln	Phe
			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35				40						45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
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Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
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<210> 3469

<211> 1710

<212> DNA

<213> Homo sapiens

<400> 3469

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<210> 3470

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3470

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Pro Asp Glu Asp Leu Ser His Arg Asn Lys Glu Pro Pro Ala Pro Ala			
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Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala			
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Arg Val Glu Lys Ile Phe Thr Pro Ala Ala Pro Val His Thr Asn Lys			
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Glu Asp Pro Ala Thr Gln Thr Asn Leu Gly Phe Ile His Ala Phe Val			
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Ala Ala Ile Ser Val Ile Ile Val Ser Glu Leu Gly Asp Lys Thr Phe			
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Phe Ile Ala Ala Ile Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu			
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Ser Thr Val Leu Phe Ala Ile Phe Gly Ile Arg Met Leu Arg Glu Gly			
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Leu Lys Met Ser Pro Asp Glu Gly Gln Glu Glu Leu Glu Glu Val Gln			
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Ala Glu Leu Lys Lys Lys Asp Glu Glu Phe Gln Arg Thr Lys Leu Leu			
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Asn Gly Pro Gly Asp Val Glu Thr Gly Thr Ser Ile Thr Val Pro Gln			
210	215	220	
Lys Lys Trp Leu His Phe Ile Ser Pro Ile Phe Val Gln Ala Leu Thr			
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Leu Thr Phe Leu Ala Glu Trp Gly Asp Arg Ser Gln Leu Thr Thr Ile			
245	250	255	
Val Leu Ala Ala Arg Glu Asp Pro Tyr Gly Val Ala Val Gly Gly Thr			
260	265	270	
Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg Met			
275	280	285	
Ile Ala Gln Lys Ile Ser Val Arg Thr Val Thr Ile Ile Gly Gly Ile			
290	295	300	
Val Phe Leu Ala Phe Ala Phe Ser Ala Leu Phe Ile Ser Pro Asp Ser			
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<210> 3471

<211> 2335

<212> DNA

<213> Homo sapiens

<400> 3471

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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln	Phe	Tyr
			20				25					30			
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
		35				40						45			
Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
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Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val
			85					90						95	
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
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Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
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Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
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Ala	Leu	Pro	Lys	Leu	Pro	Ile	Ser	Leu	Thr	Asn	Thr	Asp	Leu	Lys	Val
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			165					170						175	
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
			180					185					190		
Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
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Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
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 Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln Pro Ser
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 Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr Arg Gln
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 305 310 315 320
 Ala Ser Leu Cys Lys Leu Ser Pro Cys Thr Val Thr Arg Val Cys Asp
 325 330 335
 Tyr His Thr Lys Leu Phe Leu Ile Ala Ile Ser Ser Thr Leu Lys Ser
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 Arg Leu Thr Glu Ile Cys Thr Lys Ile Thr Asp Val Asp Ile Asp Lys
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 385 390 395 400
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 Tyr Leu Leu Ala Ser Leu Pro Asn Gln Gly Ser Leu Leu Arg Pro Gly
 420 425 430
 His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg Glu Leu
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 Met Val Val Ile Arg Ile Trp Gly Leu Leu Lys Pro Ser Cys Leu Pro
 450 455 460
 Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu Leu Phe
 465 470 475 480
 Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly Pro Ala
 485 490 495
 Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu Pro Ser
 500 505 510
 Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp Gly Leu
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 Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe Gly Arg
 530 535 540
 Ala Pro Thr Leu Pro Gly Ser Ala Ala Thr Leu Gln Leu Asp Gly Leu
 545 550 555 560
 Ala Arg Ala Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg Leu His
 565 570 575
 Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg Cys Gly
 580 585 590
 Cys Val Thr Met Leu Lys Ser Pro Asn Arg Thr Thr Ala Val Lys Gln
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<210> 3473

<211> 1660

<212> DNA

<213> Homo sapiens

<400> 3473

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<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

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			20					25					30		
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
		35					40					45			
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
	50					55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
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Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
				85					90					95	
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
			100					105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
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Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
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Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
		195					200					205			
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
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Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Gln	Asn	Glu	Val	
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Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

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 355 360 365
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 370 375 380
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 385 390 395 400
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 405 410 415
 Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
 420 425 430
 Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
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<210> 3475

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3475

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<210> 3476

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3476

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Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
      50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
      65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
      85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
      100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
      115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
      130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
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Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
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<210> 3477

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3477

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gcgcgcctcg gctgcctgcc cggcggtctc cgggtcctcg tccagaccgg ccaccggagc
60
ttgacctctc gcacgcaccc ttccatggga cttaatgaag agcagaaaga atttcaaaaa
120
gtggcctttg actttgctgc ccgagagatg gtcctcaaata tggcagagtg ggaccagaag
180
gtaggcgttt ttcttgtgct tagacgttct aacaacagat gtctcaggca gacctttatc
240
tttgtctccc gataatgtaa ttgttaaatag tctctccac ttaccaactc ttactgcaag
300
tgagaatacc ggtagtggat gatttttctc agaaggcatc ctgatcatct tgtaca
356

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<210> 3478

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3478

```

Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
  1                5                10                15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
      20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
      35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
      50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

```

```

<400> 3480
Xaa Phe Gln Pro Ser Leu Lys Gly Lys Ala Thr Ser Glu Asp Thr Leu
 1             5             10             15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
      20             25             30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

```

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<210> 3481
<211> 1794
<212> DNA
<213> Homo sapiens
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2649

tggcccaggg agcactaatt ccaagaggca ggccacttgg ttcttggaga aggagaagag
 900
 cagactgctg gctgaggcag cacttgagtt gcgggaggag aacacgaggg aggaacggat
 960
 tctggccctg gccaaagcag tagccatgct gcggggacag gaccccgaga gactgaccct
 1020
 ccaggactat cgctcccag acagtgatga cgacgaggat gaggagacag ccattccaaag
 1080
 agtctgcag cagctcactg aagaagcttc cctggatgag gcaagtggct ttaacatccc
 1140
 tgcagagcag gcttctcgac cctggacgca, accccgcggg gcagagcctg aggccaggag
 1200
 tgtggacccc aggcctgagg ctgaggaaga ggagctcccc tgggtgctgca tctgcaatga
 1260
 ggatgccacc ctacgctgag ctggctgaga tggggacctc ttctgtgccc gctgcttccg
 1320
 agagggccat gatgcctttg agcttaaaga gcaccagaca tctgcctact ctctccacg
 1380
 tgcaggccaa gagcactgaa gacaccctgg tctcccgga agggcagtc caccaggcagc
 1440
 ggcaaccatt tctgggcccc gccacaggac gtccgatggg agagcttgct tggctctact
 1500
 gatgatggat aggcctctc ctgagccttg gtgtccctgg aatgaggaaa gattctccat
 1560
 tcgagagaat gactgggagg gaagaagtcg gggccctcct attagaagcc cagactggaa
 1620
 gtgagaggca tgatggggag agaccagact gaatctacgg gtgagccctg taacctggct
 1680
 ctagggcaca ggccccctcc ctggcactta gtgggtctaa taaagtatgt tgattcattg
 1740
 ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa
 1794

<210> 3482

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10						15	
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35				40					45				
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
	50					55					60				
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
65				70					75					80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
			85					90						95	
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

115	120	125
Arg Gln Glu Asn Lys Pro Lys Leu Val Pro Ser Gln Ala Glu Ile Glu		
130	135	140
Ala Arg Leu Ala Ala Leu Lys Asp Glu Arg Gln Gly Ser Ile Pro Ser		
145	150	155
Thr Gln Glu Met Glu Ala Arg Leu Ala Ala Leu Gln Gly Arg Val Leu		
165	170	175
Pro Ser Gln Thr Pro Gln Pro Gly Thr Ser His Thr Gly His Gln Asp		
180	185	190
Pro Ser Pro Ala Asp Thr Gly Ser Ala Asn Ala Ala Gly Ser		
195	200	205

<210> 3483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3483

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ncggccgcgg cgcggaacgg cgccctcccg cccaccatgg gcaacagcgc gagccgcaac
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gacttcgagt gggctctacac cgaccagccg cacacgcagc ggcgcaagga gatactggcc
120
aagtaccggg ccatacaggc cctgatgcgg ccagaccggc gcctcaagtg ggcggggctg
180
gtgctgggtgc tgggtcagat gctggcctgc tggctgggtgc gggggctggc ctggcgctgg
240
ctgctgttct gggcctacgc ctttggtggc tgcgtgaacc actcgctgac gctggccatc
300
cacgacatct cgcacaacgc ggccttcggc acggggcgtg cggcacgcaa ccgctggctg
360
gccgtgttcg ccaacctgcc cgtgggtgtg ccctacggcg cctccttcaa gaagtaccac
420
gtggaccacc accgctacct gggcgggcgac ggactggacg tggacgtgcc cacgcgt
477

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<210> 3484

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3484

Met Gly Asn Ser Ala Ser Arg Asn Asp Phe Glu Trp Val Tyr Thr Asp	
1	15
Gln Pro His Thr Gln Arg Arg Lys Glu Ile Leu Ala Lys Tyr Pro Ala	
20	30
Ile Lys Ala Leu Met Arg Pro Asp Pro Arg Leu Lys Trp Ala Gly Leu	
35	45
Val Leu Val Leu Val Gln Met Leu Ala Cys Trp Leu Val Arg Gly Leu	
50	60
Ala Trp Arg Trp Leu Leu Phe Trp Ala Tyr Ala Phe Gly Gly Cys Val	
65	80
Asn His Ser Leu Thr Leu Ala Ile His Asp Ile Ser His Asn Ala Ala	
85	95
Phe Gly Thr Gly Arg Ala Ala Arg Asn Arg Trp Leu Ala Val Phe Ala	

	100		105		110										
Asn	Leu	Pro	Val	Gly	Val	Pro	Tyr	Ala	Ala	Ser	Phe	Lys	Lys	Tyr	His
	115					120					125				
Val	Asp	His	His	Arg	Tyr	Leu	Gly	Gly	Asp	Gly	Leu	Asp	Val	Asp	Val
	130					135					140				
Pro	Thr	Arg													
145															

<210> 3485

<211> 812

<212> DNA

<213> Homo sapiens

<400> 3485

tatttattta tagtcacaaa aactgttcag gaagaaatgt tatgaaaaga acatttttac
60
tgcattgctta aaacatttaa tttctatta tacagttaa catttgcttg aattcagtga
120
gtctaaaaaa tcttattgtt ctgaggttag cagttagttg agcagagtc attggtgaag
180
caatctagtt attggcaaat tctaacacat ggtaaggtgt gggggaaagg atttaaaata
240
acagaaaaat gtaagtacaa acatacataa cagcaaaata aaactcactt taacaaaaat
300
ttatttaaaa tggtaacccc atatttcctc aatgaccaac ttgtttcagt tttatctccc
360
cctcatccgg ttattttatg tctttttggg aggaagggag atgagggttt ttgtttttta
420
acaaaatcac tggcttttta aaaagtgtta ctgcagtcac ttataagatg catgttatgt
480
ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt
540
atgagtcag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac
600
attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact
660
ccttggtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcataacta
720
tccaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa
780
ggaacacgca tgtccttaaa ctcaaaggat cc
812

<210> 3486

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3486

Met	Arg	Val	Pro	Ser	Ala	Leu	Val	Thr	Leu	His	Met	Leu	Leu	Cys	Ser
1				5				10				15			
Ile	Pro	Leu	Ser	Gly	Arg	Leu	Asp	Ser	Asp	Glu	Gln	Lys	Ile	Gln	Asn
			20				25					30			
Asp	Ile	Ile	Asp	Ile	Leu	Leu	Thr	Phe	Thr	Gln	Gly	Val	Asn	Glu	Lys

35	40	45
Leu Thr Ile Ser Glu Glu Thr Leu Ala Asn Asn Thr Trp Ser Leu Met		
50	55	60
Leu Lys Glu Val Leu Ser Ser Ile Leu Lys Val Pro Glu Gly Phe Phe		
65	70	75
Ser Gly Leu Ile Leu Leu Ser Glu Leu Leu Pro Leu Pro Leu Pro Met		
85	90	95
Gln Thr Thr Gln Val Ser Leu Pro His Asn Met His Leu Ile Asn Asp		
100	105	110
Cys Ser Asn Thr Phe		
115		

<210> 3487

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3487

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nnattgtatc aaaatcctag atttgaataa cttattattt taaataatca gtaactaaaa
60
ccaagcaatc catcacacaa agaggggaaa gggtaatat ctgagttata aattttttac
120
cctgtctgat aaaaatagaa gcctgaaagt ttaaattttt cctggattta aatttaaaga
180
taaatttggt tttcagttaa atattcctca tagcaatttt accaaagagg cttcttctg
240
aaggccacct ctgaaataat tagaggataa atgtcaatgg catgatatta agatattact
300
tggccaggcg tggctgtcac gcgtgtaatc ccagcacttt gggaggccga ggcagggtgga
360
tcacgaggtc aagaaatcga gaccagcctg gctaacacag tgaaaccccg tctcattctg
420
agctttctga caccttttaa tccagtcact gaaattagca tctgcaccta gaaagaaaaa
480
actgactata acatcactca tctgcacaac ctattaatca gcaaatactt actgaatacc
540
tactacatcc caggcagtgt tctaggcact ggggagtcgg cagcgaacaa aacctgtctt
600
aacagacctt atcaccaact ctactatagt tataaacata ccaatagttt aacatttagt
660
tgtaatcat gaaacatttt gatTTTTTaa aaattTTTaa tacagtcaac cttaatttca
720
cagatacaaa taatctgcat ttcccccaat cccgctgctc ttagagaagc tt
772

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<210> 3488

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3488

Asp Ile Thr Trp Pro Gly Val Val Val Thr Arg Val Ile Pro Ala Leu
1 5 10 15
Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser

	20		25		30
Leu	Ala	Asn	Thr	Val	Lys
	35		40		45
Phe	Asn	Pro	Val	Thr	Glu
	50		55		

<210> 3489

<211> 288

<212> DNA

<213> Homo sapiens

<400> 3489

tagctaacac tccactatgg gagcccatct cctcccaggg ccagggagac cagggagacc
60
agggagacca ggtctggccc ccaactctaa ggctcatctt agaggcgaga ttcaggccca
120
gcccaggggtg ccccatgagg cctgggtggtt ggaggcagag ggtatccctt gccc aaattc
180
gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tggctcacac
240
ctgtaatccc agcactttgg agagccccaa gacgacggat cacgagtc
288

<210> 3490

<211> 90

<212> PRT

<213> Homo sapiens

<400> 3490

Met	Gly	Ala	His	Leu	Leu	Pro	Gly	Pro	Gly	Arg	Pro	Gly	Arg	Pro	Gly
1			5				10				15				
Arg	Pro	Gly	Leu	Ala	Pro	Asn	Ser	Lys	Ala	His	Leu	Arg	Gly	Glu	Ile
		20				25					30				
Gln	Ala	Gln	Pro	Arg	Val	Pro	His	Glu	Ala	Trp	Trp	Leu	Glu	Ala	Glu
	35					40					45				
Gly	Ile	Pro	Cys	Pro	Asn	Ser	Cys	His	Ile	His	Ser	His	Trp	Glu	Ser
	50				55				60						
Tyr	Gly	Asp	Gly	Pro	Gly	Ala	Val	Ala	His	Thr	Cys	Asn	Pro	Ser	Thr
65			70				75							80	
Leu	Glu	Ser	Pro	Lys	Thr	Thr	Asp	His	Glu						
			85				90								

<210> 3491

<211> 568

<212> DNA

<213> Homo sapiens

<400> 3491

gggaaccgac gtccctctgt ggtgaaattc cacccttca cgccgtgcat cgccgtagcc
60
gacaaggaca gcatctgctt ttgggactgg gagaaagggg agaagctgga ttatttccac
120
aatgggaacc ctcggtacac gagggtcact gccatggagt atctgaatgg ccaggactgc
180

tcgcttctgc tgacggccac agacgatggt gccatcaggg tctggaagaa ttttctgat
 240
 ttggaaaaga acccagagat ggtgaccgcg tggcaggggc tctcggacat gctgccaacg
 300
 acgcgaggag ctgggatggt ggtggactgg gagcaggaga cggcctcct catgagctca
 360
 ggagacgtgc ggatcgctcg gatctgggac acagaccgtg agatgaaggt gcaggacatc
 420
 cctacgggcg cagacagctg tgtgacgagt ctgtcctgtg attcccaccg ctactcacc
 480
 gtggctggcc tcgggtgacgg ctccatccgc gtctacgaca gaaggatggc actcagcgaa
 540
 tgcccgctca tgacgtaccg ggagcaca
 568

<210> 3492

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3492

Gly	Asn	Arg	Arg	Pro	Ser	Val	Val	Lys	Phe	His	Pro	Phe	Thr	Pro	Cys
1				5				10						15	
Ile	Ala	Val	Ala	Asp	Lys	Asp	Ser	Ile	Cys	Phe	Trp	Asp	Trp	Glu	Lys
		20					25						30		
Gly	Glu	Lys	Leu	Asp	Tyr	Phe	His	Asn	Gly	Asn	Pro	Arg	Tyr	Thr	Arg
		35					40					45			
Val	Thr	Ala	Met	Glu	Tyr	Leu	Asn	Gly	Gln	Asp	Cys	Ser	Leu	Leu	Leu
	50					55					60				
Thr	Ala	Thr	Asp	Asp	Gly	Ala	Ile	Arg	Val	Trp	Lys	Asn	Phe	Ala	Asp
65					70					75				80	
Leu	Glu	Lys	Asn	Pro	Glu	Met	Val	Thr	Ala	Trp	Gln	Gly	Leu	Ser	Asp
			85						90					95	
Met	Leu	Pro	Thr	Thr	Arg	Gly	Ala	Gly	Met	Val	Val	Asp	Trp	Glu	Gln
		100					105						110		
Glu	Thr	Gly	Leu	Leu	Met	Ser	Ser	Gly	Asp	Val	Arg	Ile	Val	Arg	Ile
	115						120					125			
Trp	Asp	Thr	Asp	Arg	Glu	Met	Lys	Val	Gln	Asp	Ile	Pro	Thr	Gly	Ala
	130					135					140				
Asp	Ser	Cys	Val	Thr	Ser	Leu	Ser	Cys	Asp	Ser	His	Arg	Ser	Leu	Ile
145					150					155				160	
Val	Ala	Gly	Leu	Gly	Asp	Gly	Ser	Ile	Arg	Val	Tyr	Asp	Arg	Arg	Met
			165					170						175	
Ala	Leu	Ser	Glu	Cys	Arg	Val	Met	Thr	Tyr	Arg	Glu	His			
		180						185							

<210> 3493

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 3493

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 60

aaggaactgt ttggagatga cagtgaggac gagggagctt cacatcatag tggtagtgat
120
aatcactctg aaagatcaga caatagatca gaagcttctg agcgttctga ccatgaggac
180
aatgaccct cagatgtaga tcagcacagt ggatcagaag cccctaata tgaatgaagac
240
gaaggtcata gatcgatgg agggagccat cattcagaag cagaaggctt tgaataagca
300
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360
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420
tctgacgatg atgagaaaat gcagaacaca gatgatgagg agaggcctca gctttccgat
480
gatgagagac aacagctatc tgaggaggaa aaggctaatt ctgatgatga acggccggta
540
gcttctgata atgatgatga gaaacagaat tctgatgatg aagaacaacc acagctgtct
600
gatgaagaga aaatgcaaaa ttctgatgat gaaaggccac agggcccaga tgaagaacac
660
aggcattcag atgatgaaga ggaacaggat cataaatcag aatccgcaag aggcagtgat
720
agtgaagatg aagttttacg aatgaaacgc aagaatgcga ttgcatctga ttcagaagcg
780
gatagtgaca ctgaggtgcc aaaagataat agtggaacca tggatttatt tggaggtgca
840
gatgatatct cttcagggag tgatggagaa gacaaaccac ctactccagg acagcctgtt
900
gatgaaaatg gattgcctca ggatcaacag gaagaggagc caattcctga gaccagaata
960
gaagtagaaa tacccaaagt aaacactgat ttaggaaacg acttatattt tgttaaactg
1020
cccaactttc tcagtgtaga gccagacct tttgatcctc agtattatga agatgaattt
1080
gaagatgaag aaatgctgga tgaagaaggt agaaccaggt taaaattaaa ggtagaaaat
1140
actataagat ggaggatacg ccgagatgaa gaaggaaatg aaattaaaga aagcaatgct
1200
cggatagtca agtggtcaga tggaagcatg tccctgcatt taggcaatga agtggttgat
1260
gtgtacaaaag cccactgca gggcgaccac aatcatcttt ttataagaca aggtactggt
1320
ctacagggac aagcagctct taaagcgaaa ctcaccttca gacctcactc tacggacagt
1380
gccacacata gaaagatgac tctgtcactt gcagataggt gttcaaagac acagaagatt
1440
agaatcttgc caatggctgg tcgtgatcct gaatgccaac gcacagaaat gattaagaaa
1500
gaagaagaac gtttgagggc ttccatacgt agggaatctc agcagcgccg aatgagagag
1560
aaacagcacc agcgggggct gagcgccagt tacctggaac ctgatcgata cgatgaggag
1620
gaggaaggcg aggagtccat cagettggct gccattaaaa accgatataa agggggcatt
1680

cgagaggaac gagccagaat ctattcatca gacagtgatg agggatcaga agaagataaa
 1740
 gctcaaagat tactcaaagc aaagaaactt accagtgatg aggaagggtga accttcgga
 1800
 aagagaaaag cagaagatga tgataaagca aataaaaagc ataagaagta tgtgatcagc
 1860
 gatgaagagg aagaagatga tgattgaagt atgaaatatg aaaacatttt atatatttta
 1920
 ttgtacagtt ataaatatgt aaacatgagt tattttgatt gaaatgaatc gatttgcttt
 1980
 tgtgtaattt taattgtaat aaaacaattt aaaagcaagt ctctatgttt aagaaatcta
 2040
 cttttccggc caggcgcggt ggctcatgcc tgtaatccca gcacttcggg aggccgaggc
 2100
 aggtggatca caaggtcgtg gtggcgggtg cctgtagtcg cagctactcg ggaggctgag
 2160
 gcgggggaat tggttgaacc caggaggcag aggttgcagt tagccgagat cgcgccactg
 2220
 cactccagcc tggcgacaga gcta
 2244

<210> 3494

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3494

Xaa	Gly	Gly	Tyr	Pro	Cys	Ser	Asp	Gln	Asp	Glu	Arg	Gly	Asp	Ser	Gly
1				5				10					15		
Gln	Pro	Ser	Asn	Lys	Glu	Leu	Phe	Gly	Asp	Asp	Ser	Glu	Asp	Glu	Gly
			20				25					30			
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn
		35					40					45			
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser
		50					55					60			
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp
65					70					75				80	
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	Ser	Glu	Ala	Glu	Gly	
			85						90				95		
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys
			100					105					110		
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu
		115					120					125			
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp
			130				135				140				
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp
145					150					155				160	
Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp
			165						170				175		
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp
			180						185				190		
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser
			195					200				205			
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp

210	215	220
Asp Glu Glu Glu Gln Asp His Lys Ser Glu Ser Ala Arg Gly Ser Asp		
225	230	235
Ser Glu Asp Glu Val Leu Arg Met Lys Arg Lys Asn Ala Ile Ala Ser		240
	245	250
Asp Ser Glu Ala Asp Ser Asp Thr Glu Val Pro Lys Asp Asn Ser Gly		255
	260	265
Thr Met Asp Leu Phe Gly Gly Ala Asp Asp Ile Ser Ser Gly Ser Asp		270
	275	280
Gly Glu Asp Lys Pro Pro Thr Pro Gly Gln Pro Val Asp Glu Asn Gly		285
	290	295
Leu Pro Gln Asp Gln Gln Glu Glu Glu Pro Ile Pro Glu Thr Arg Ile		300
305	310	315
Glu Val Glu Ile Pro Lys Val Asn Thr Asp Leu Gly Asn Asp Leu Tyr		320
	325	330
Phe Val Lys Leu Pro Asn Phe Leu Ser Val Glu Pro Arg Pro Phe Asp		335
	340	345
Pro Gln Tyr Tyr Glu Asp Glu Phe Glu Asp Glu Glu Met Leu Asp Glu		350
	355	360
Glu Gly Arg Thr Arg Leu Lys Leu Lys Val Glu Asn Thr Ile Arg Trp		365
	370	375
Arg Ile Arg Arg Asp Glu Glu Gly Asn Glu Ile Lys Glu Ser Asn Ala		380
385	390	395
Arg Ile Val Lys Trp Ser Asp Gly Ser Met Ser Leu His Leu Gly Asn		400
	405	410
Glu Val Phe Asp Val Tyr Lys Ala Pro Leu Gln Gly Asp His Asn His		415
	420	425
Leu Phe Ile Arg Gln Gly Thr Gly Leu Gln Gly Gln Ala Val Phe Lys		430
	435	440
Ala Lys Leu Thr Phe Arg Pro His Ser Thr Asp Ser Ala Thr His Arg		445
	450	455
Lys Met Thr Leu Ser Leu Ala Asp Arg Cys Ser Lys Thr Gln Lys Ile		460
465	470	475
Arg Ile Leu Pro Met Ala Gly Arg Asp Pro Glu Cys Gln Arg Thr Glu		480
	485	490
Met Ile Lys Lys Glu Glu Glu Arg Leu Arg Ala Ser Ile Arg Arg Glu		495
	500	505
Ser Gln Gln Arg Arg Met Arg Glu Lys Gln His Gln Arg Gly Leu Ser		510
	515	520
Ala Ser Tyr Leu Glu Pro Asp Arg Tyr Asp Glu Glu Glu Glu Gly Glu		525
	530	535
Glu Ser Ile Ser Leu Ala Ala Ile Lys Asn Arg Tyr Lys Gly Gly Ile		540
545	550	555
Arg Glu Glu Arg Ala Arg Ile Tyr Ser Ser Asp Ser Asp Glu Gly Ser		560
	565	570
Glu Glu Asp Lys Ala Gln Arg Leu Leu Lys Ala Lys Lys Leu Thr Ser		575
	580	585
Asp Glu Glu Gly Glu Pro Ser Gly Lys Arg Lys Ala Glu Asp Asp Asp		590
	595	600
Lys Ala Asn Lys Lys His Lys Lys Tyr Val Ile Ser Asp Glu Glu Glu		605
	610	615
Glu Asp Asp Asp		620
625		

<210> 3495
 <211> 1085
 <212> DNA
 <213> Homo sapiens

<400> 3495
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 cgcagacaca agatggtgaa ggagaccag tactatgaca tcctgggcgt gaagcccagc
 120
 gcgtccccgg aggagatcaa gaaggcctat cggaagctgg cgctcaagta ccaccggac
 180
 aagaaccgg atgagggcga gaagtttaaa ctcatatccc aggcatatga agtgctttca
 240
 gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc
 300
 tcaggcagcc ccagcttctc ttcacccatg gacatctttg acatgttctt tgggtggtgt
 360
 ggacggatgg ctagagagag aagaggcaag aatgttgtac accagttatc tgtaactctt
 420
 gaagatctat ataatggagt cacgaagaaa ttggccctcc agaaaaatgt aatttgtgag
 480
 aaatgtgaag gtgttggtgg gaagaagga tcggtggaga agtgcccgt gtgcaagggg
 540
 cgggggatgc agatccacat ccagcagatc gggccgggca tggtagagca gatccagacc
 600
 gtgtgcatcg agtgcaaggg ccagggtgag cgcataacc ccaaggaccg ctgcgagagc
 660
 tgcagcgggg ccaaggtgat ccgtgagaag aagattatcg aggtacatgt tgaaaaaggt
 720
 atgaaagatg ggcaaaagat actatttcat ggagaaggag atcaggagcc tgagctggag
 780
 cctggtgatg tcataattgt gcttgatcag aaggatcata gtgtctttca gagacgaggc
 840
 catgacttga tcatgaaaat gaaaattcag ctttctgaag ctctttgtgg cttcaagaag
 900
 acgataaaaa cattggacaa tcgaattctt gttattacat ccaagcagg tgaggtgata
 960
 aagcacgggg acctgagatg cgtgcgcgat gaaggaatgc ccatctacaa agcaccctg
 1020
 gaaaaaggga ttctgatcat acagttttta gtaatcttct ctganaaaca ctggctttct
 1080
 ctgga
 1085

<210> 3496
 <211> 337
 <212> PRT
 <213> Homo sapiens

<400> 3496
 Met Val Lys Glu Thr Gln Tyr Tyr Asp Ile Leu Gly Val Lys Pro Ser
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 Ala Ser Pro Glu Glu Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Lys

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 Tyr His Pro Asp Lys Asn Pro Asp Glu Gly Glu Lys Phe Lys Leu Ile
 35 40 45
 Ser Gln Ala Tyr Glu Val Leu Ser Asp Pro Lys Lys Arg Asp Val Tyr
 50 55 60
 Asp Gln Gly Gly Glu Gln Ala Ile Lys Glu Gly Gly Ser Gly Ser Pro
 65 70 75 80
 Ser Phe Ser Ser Pro Met Asp Ile Phe Asp Met Phe Phe Gly Gly Gly
 85 90 95
 Gly Arg Met Ala Arg Glu Arg Arg Gly Lys Asn Val Val His Gln Leu
 100 105 110
 Ser Val Thr Leu Glu Asp Leu Tyr Asn Gly Val Thr Lys Lys Leu Ala
 115 120 125
 Leu Gln Lys Asn Val Ile Cys Glu Lys Cys Glu Gly Val Gly Gly Lys
 130 135 140
 Lys Gly Ser Val Glu Lys Cys Pro Leu Cys Lys Gly Arg Gly Met Gln
 145 150 155 160
 Ile His Ile Gln Gln Ile Gly Pro Gly Met Val Gln Gln Ile Gln Thr
 165 170 175
 Val Cys Ile Glu Cys Lys Gly Gln Gly Glu Arg Ile Asn Pro Lys Asp
 180 185 190
 Arg Cys Glu Ser Cys Ser Gly Ala Lys Val Ile Arg Glu Lys Lys Ile
 195 200 205
 Ile Glu Val His Val Glu Lys Gly Met Lys Asp Gly Gln Lys Ile Leu
 210 215 220
 Phe His Gly Glu Gly Asp Gln Glu Pro Glu Leu Glu Pro Gly Asp Val
 225 230 235 240
 Ile Ile Val Leu Asp Gln Lys Asp His Ser Val Phe Gln Arg Arg Gly
 245 250 255
 His Asp Leu Ile Met Lys Met Lys Ile Gln Leu Ser Glu Ala Leu Cys
 260 265 270
 Gly Phe Lys Lys Thr Ile Lys Thr Leu Asp Asn Arg Ile Leu Val Ile
 275 280 285
 Thr Ser Lys Ala Gly Glu Val Ile Lys His Gly Asp Leu Arg Cys Val
 290 295 300
 Arg Asp Glu Gly Met Pro Ile Tyr Lys Ala Pro Leu Glu Lys Gly Ile
 305 310 315 320
 Leu Ile Ile Gln Phe Leu Val Ile Phe Pro Xaa Lys His Trp Leu Ser
 325 330 335
 Leu

<210> 3497

<211> 1638

<212> DNA

<213> Homo sapiens

<400> 3497

nnaagttaaa aataaatttt caaaccttat catatttact ttaccaacaa tcttgattac
 60
 gtggcaactt tggtgctata attttatgca gcagataaag gtagacgttc ctccccaag
 120
 tttttagtat atccttctaa aaagttttcc tgagaatttt tagtttggcc tctcaagttt
 180

ccttatttta ccttttctta aattacctcc ctcttctctt agtgaaatga gccttccttc
240
agcatacgca acttatcctt attgcttttt tcatacccaa ttttttggtt tatctctttc
300
agccaactgg gtctgaagt agctgaaatg cgaaaaaggc agcagtccca aaatgaagga
360
acacctgctg tgtctcaagc tcttggaac cagaggccca acaacacctg ttgcttttgt
420
tggtgctggt gttgcagctg ctctgcctc actgtgagga atgaagaaag aggggaaaat
480
gcgggaagac ccacacacac tacaaaaatg gagagtatcc aggtcctaga ggaatgccaa
540
aaccctactg cagaggaagt cttgtcctgg tctcaaaatt ttgacaagat gatgaaggcc
600
ccagcaggaa gaaacctttt cagagagttc ctccgaacag aatacagtga agagaaccta
660
cttttctggc ttgcttgta agacttaaag aaggagcaga acaaaaaagt aattgaagaa
720
aaggctagga tgatatatga agattacatt tctatactat caccaaaaga ggtcagtctt
780
gattctcgag ttgagaggt gatcaataga aatctgttg atcccaatcc tcacatgtat
840 aacttcagat atatacttta atgcacagag attcttttcc aaggtttttg 900
aactctcaaa tttataagtc atttgttgaa agtactgctg gctcttcttc tgaatcttaa
960
tgttcattta aaaacaatca ttttgagggg ctgagatggg aaataaaagt agttaaataa
1020
catcagaaac tgagttcctg gagaactaca gtttagcatt cctcaggcta ctgtgaaaac
1080
acaaccgtta tggcttttgt ctccattttt atcaagggtt tccatgggta agtttgagga
1140
aaataccaca caaaacaatg aattgccaaa ttgtttgttt tattcaagac tcattctact
1200
tgcaagcaaa gtgtatttgt agtctatga acagtctcct cgtgtatctc cagagactgc
1260
atgtgcaaa gtaaaatgctt catttgccac atagttgttg taatatttaa tccagtagca
1320
taacttatat ctgtatttaa ggacttttgt gcaatatggg cttaagaaat aattgccaaa
1380
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1440
ctatgtaaca atggatttca acattctata tactgtgttt agtacactaa ttttgaagcc
1500
aatatttctg tacatgaaaa agagctatct atctctgttt gttggaaaat cctaattggg
1560
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1620
ctaaaagcaa aaaacaaa
1638

<210> 3498

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3498

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 Gln Ala Pro Gly Asn Gln Arg Pro Asn Asn Thr Cys Cys Phe Cys Trp
 20 25 30
 Cys Cys Cys Cys Ser Cys Ser Cys Leu Thr Val Arg Asn Glu Glu Arg
 35 40 45
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile
 50 55 60
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser
 65 70 75 80
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn
 85 90 95
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu
 100 105 110
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val
 115 120 125
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu
 130 135 140
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn
 145 150 155 160
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu
 165 170 175
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn
 180 185 190
 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser
 195 200 205
 Glu Ser
 210

<210> 3499

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3499

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 120
 tgccacgggc ggcgtcccag cctggcacag aggtattgtg attccanaa tggccaagnc
 180
 aacagactcn aacctcagga tngttctatt ttgcgccaga agcaataatt ttttttctt
 240
 tctggaaagc cctttcaaga tagtgatgtt gatgtggggg caggcggtc gccgggtaca
 300
 tggaggtacc ggggtcacag cagcgcaagc accgggaagc agggagcccc tggctctgac
 360
 tgggcctgta tttttcatgt tgttcttcag cctctcggc atgggtccga ggcgacggca
 420
 gctctcagt cccctccac tctgtctgtt cccctggac atggggcaca cgactcagga
 480
 ccaggccaga ggcaaaggca aggagcaggc agtacgccag caagagtctt tgtccacggg
 540

agcccatctt cctgccgggc cctccgtccc gccggccgct cctcccgcg cgcacctaga
 600
 gcattctccg ccggccaagc ctctcccg ccanggtccg gggcgatgca cagactcggt
 660
 gaaggaaaca gaggaggga aaaggtcttc cggaggacgg cagtgcagaa gaggagggtg
 720
 gggggcggtg cg
 732

<210> 3500

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3500

Phe	Phe	Phe	Pro	Ser	Gly	Lys	Pro	Phe	Gln	Asp	Ser	Asp	Val	Asp	Val
1			5						10				15		
Gly	Ala	Arg	Arg	Ser	Pro	Gly	Thr	Trp	Arg	Tyr	Arg	Gly	His	Ser	Ser
			20					25					30		
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
			35				40					45			
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
50						55					60				
Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
65					70					75				80	
His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
				85				90						95	
Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
			100					105					110		
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
			115				120					125			
Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
			130			135				140					
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
145					150					155				160	
Lys	Arg	Arg	Val	Gly	Gly	Gly	Thr								
					165										

<210> 3501

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3501

nnagtagcaa ccgccggaat ggcgaaagca acaacaatca aagaagcctt agcgagatgg
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 120
 cccctatag agaagatgga tgcattcttg tccatgcttg ctaattgcga gaagctttca
 180
 ctgtctacaa actgcattga aaaaattgcc aacctgaatg gcttaaaaaa cttgaggata
 240
 ttatcttttag gaagaaacaa cataaagaac ttaaatggac tggaggcagt aggggacaca
 300

ttagaagaac tgtggatctc ctacaatttt attgagaagt tgaaagggat ccacataatg
 360
 aagaaattga agattctcta catgtctaata aacctggtaa aagactgggc tgagtttgtg
 420
 aagctggcag aactgccatg cctcgaagac ctggtgtttg taggcaatcc cttggaagag
 480
 aaacattctg ctgagaataa ctggattgaa gaagcaacca agagagtgcc caaactgaaa
 540
 aagctggatg gtactccagt aattaaaggg gatgaggaag aagacaacta atgccacgct
 600
 ttccactgtg tgttaactta tttaaattgtc ataagaacaa tagataaatt ttatataatt
 660
 gtctatttta aaaaaaaaaa aaaaaaaaaa a
 691

<210> 3502

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3502

Xaa	Val	Ala	Thr	Ala	Gly	Met	Ala	Lys	Ala	Thr	Thr	Ile	Lys	Glu	Ala
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Leu	Ala	Arg	Trp	Glu	Glu	Lys	Thr	Gly	Gln	Arg	Pro	Ser	Glu	Ala	Lys
			20					25					30		
Glu	Ile	Lys	Leu	Tyr	Ala	Gln	Ile	Pro	Pro	Ile	Glu	Lys	Met	Asp	Ala
		35				40						45			
Ser	Leu	Ser	Met	Leu	Ala	Asn	Cys	Glu	Lys	Leu	Ser	Leu	Ser	Thr	Asn
	50					55					60				
Cys	Ile	Glu	Lys	Ile	Ala	Asn	Leu	Asn	Gly	Leu	Lys	Asn	Leu	Arg	Ile
65				70					75					80	
Leu	Ser	Leu	Gly	Arg	Asn	Asn	Ile	Lys	Asn	Leu	Asn	Gly	Leu	Glu	Ala
			85					90						95	
Val	Gly	Asp	Thr	Leu	Glu	Glu	Leu	Trp	Ile	Ser	Tyr	Asn	Phe	Ile	Glu
			100					105					110		
Lys	Leu	Lys	Gly	Ile	His	Ile	Met	Lys	Lys	Leu	Lys	Ile	Leu	Tyr	Met
		115				120						125			
Ser	Asn	Asn	Leu	Val	Lys	Asp	Trp	Ala	Glu	Phe	Val	Lys	Leu	Ala	Glu
	130					135					140				
Leu	Pro	Cys	Leu	Glu	Asp	Leu	Val	Phe	Val	Gly	Asn	Pro	Leu	Glu	Glu
145				150				155						160	
Lys	His	Ser	Ala	Glu	Asn	Asn	Trp	Ile	Glu	Glu	Ala	Thr	Lys	Arg	Val
			165					170						175	
Pro	Lys	Leu	Lys	Lys	Leu	Asp	Gly	Thr	Pro	Val	Ile	Lys	Gly	Asp	Glu
		180					185						190		
Glu	Glu	Asp	Asn												
		195													

<210> 3503

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3503

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 agtctcttca ctctcgtctc aaagccattt tgtgccgtg ccgctgcctc tacggccata
 120
 aatgcccaga gattagcgga gaagctccga gccagaaac gggaacaaga cacaagaag
 180
 gagccgtgt ccacaaacgc tgttcagcgg agagtgaag aaatagtgcg gttcacacgg
 240
 cagctgcagc gagtccaccc caacgtgctt gctaaggcac tgacccgagg aattctccac
 300
 caggacaaga accttgtggt catcaataag ccctacggtc tccctgtgca tggtgccct
 360
 ggggtccagc tctgcatcac tgatgtacta cctatcctgg caaagatgct tcatggccac
 420
 aaggcagagc ccttgcattt gtgccaccgg ctggacaagg aaaccacagg tgtaatggtg
 480
 ttggcttggg acaaggacat ggcacatcaa gtccaagagt tgtttagaac ccgtcaggtg
 540
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 600
 atccccattg tggagaagga ggggcaaggc cagcagcaac accccagaat gacattgtcc
 660
 ccgagctccc gcatggacga tgggaaaatg gtgaaagtgc ggcgcagccg gaatgcgcaa
 720
 gttgctgtaa ctcatgacca ggtgctcagc agcactctct cctccgcctt cgtggagctc
 780
 cagcccatca ctggaataaa acatcagctt cgagttcact tgtcttttgg attggattgt
 840
 ccaatccttg gtgatca
 857

<210> 3504

<211> 285

<212> PRT

<213> Homo sapiens

<400> 3504

Ala	Ala	Pro	Arg	Trp	Ser	Ala	Ser	Gly	Pro	Trp	Ile	Arg	Gly	Asn	Gly
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Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
		20						25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
		35					40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
	50			55						60					
Thr	Asn	Ala	Val	Gln	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg	
65				70				75					80		
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90					95		
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
		100					105					110			
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
		115					120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

130	135	140
Leu His Leu Cys His Arg Leu Asp Lys Glu Thr Thr Gly Val Met Val		
145	150	155
Leu Ala Trp Asp Lys Asp Met Ala His Gln Val Gln Glu Leu Phe Arg		160
	165	170
Thr Arg Gln Val Val Lys Lys Tyr Trp Ala Ile Thr Val His Val Pro		175
	180	185
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly		190
	195	200
Gln Gly Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg		205
	210	215
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln		220
225	230	235
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala		240
	245	250
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val		255
	260	265
His Leu Ser Phe Gly Leu Asp Cys Pro Ile Leu Gly Asp		270
	275	280
		285

<210> 3505

<211> 1612

<212> DNA

<213> Homo sapiens

<400> 3505

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ctcttcccgg tccggtcctt ggttgccgct gccatgatgc tgctggcctg gccctcgca
120
cttgctgcat ccttgggctc tggggagaag gaaccgcgagc agcccccggc cctgtggagg
180
aaggttgtgg acttctctgt gaaggccatc atgcgcacca tgtggttcgc cggcggcttc
240
caccgggtgg ccgtgaaggg gcggcaggcg ctgcccaccg aggcggccat cctcacgctc
300
gcgcctcact cgtctactt cgacgccatc cctgtgacca tgacgatgac ctccatcgtg
360
atgaagacag agagcagaga catcccgatc tggggaactc tgatccagta tatacggcct
420
gtgttcgtgt cccggtcaga ccaggattct cgcaggaaaa cagtagaaga aatcaagaga
480
cgggcgcagt ccaacggaaa gtggccacag ataatgattt ttccagaagg aacttgtaca
540
aacaggacct gcctaattac cttaaacct ggtgcattca tccttgagc gcccgccac
600
cctgggggtt tacgatatcc aaataaactg gacacatca catggacgtg gcaaggacct
660
ggagcgctgg aaatcctgtg gctcacgctg tgtcagtttc acaaccaagt ggaaatcgag
720
ttccttctctg tgtacagccc ttctgaggag gagaagagga accccgcgct gtatgccagc
780
aacgtgcggc gagtcattgc cgaggccttg ggtgtctccg tgactgacta cacgttcgag
840

gactgccagc tggccctggc ggaaggacag ctccgtctcc ccgctgacac ttgcctttta
 900
 gaatttgcca ggctcgtgcg gggcctcggg ctaaaaccag aaaagcttga aaaagatctg
 960
 gacagatact cagaaagagc caggatgaag ggaggagaga agataggtat tgcggagttt
 1020
 gccgcctccc tgaagtccc cgtttctgac ttgctggaag acatgttttc actgttcgac
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 1200
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 1260
 gagctcactg tgaccgacct attccgagcc attgaccaag aggagaaggg gaagatcaca
 1320
 ttcgtgact tccacaggtt tgcagaaatg taccctgctc tcgcagagga atacctgtac
 1380
 ccggatcaga cacatttcga aagctgtgca gagacctcac ctgcgccaat cccaaacggc
 1440
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 1500
 ctggattagg acccagggtt gcggagagac gcggcccctc ccgctggac atcaccgcca
 1560
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 1612

<210> 3506

<211> 502

<212> PRT

<213> Homo sapiens

<400> 3506

Val His Glu Leu His Leu Ser Ala Leu Gln Lys Ala Gln Val Ala Leu
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 20 25 30
 Met Leu Leu Ala Trp Pro Leu Ala Leu Val Ala Ser Leu Gly Ser Ala
 35 40 45
 Glu Lys Glu Pro Glu Gln Pro Pro Ala Leu Trp Arg Lys Val Val Asp
 50 55 60
 Phe Leu Leu Lys Ala Ile Met Arg Thr Met Trp Phe Ala Gly Gly Phe
 65 70 75 80
 His Arg Val Ala Val Lys Gly Arg Gln Ala Leu Pro Thr Glu Ala Ala
 85 90 95
 Ile Leu Thr Leu Ala Pro His Ser Ser Tyr Phe Asp Ala Ile Pro Val
 100 105 110
 Thr Met Thr Met Ser Ser Ile Val Met Lys Thr Glu Ser Arg Asp Ile
 115 120 125
 Pro Ile Trp Gly Thr Leu Ile Gln Tyr Ile Arg Pro Val Phe Val Ser
 130 135 140
 Arg Ser Asp Gln Asp Ser Arg Arg Lys Thr Val Glu Glu Ile Lys Arg
 145 150 155 160
 Arg Ala Gln Ser Asn Gly Lys Trp Pro Gln Ile Met Ile Phe Pro Glu

				165					170						175		
Gly	Thr	Cys	Thr	Asn	Arg	Thr	Cys	Leu	Ile	Thr	Phe	Lys	Pro	Gly	Ala		
			180					185					190				
Phe	Ile	Pro	Gly	Ala	Pro	Val	His	Pro	Gly	Val	Leu	Arg	Tyr	Pro	Asn		
		195					200					205					
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Ile	Leu	Trp	Leu	Thr	Leu	Cys	Gln	Phe	His	Asn	Gln	Val	Glu	Ile	Glu		
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Phe	Leu	Pro	Val	Tyr	Ser	Pro	Ser	Glu	Glu	Glu	Lys	Arg	Asn	Pro	Ala		
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Leu	Tyr	Ala	Ser	Asn	Val	Arg	Arg	Val	Met	Ala	Glu	Ala	Leu	Gly	Val		
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Ser	Val	Thr	Asp	Tyr	Thr	Phe	Glu	Asp	Cys	Gln	Leu	Ala	Leu	Ala	Glu		
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Gly	Gln	Leu	Arg	Leu	Pro	Ala	Asp	Thr	Cys	Leu	Leu	Glu	Phe	Ala	Arg		
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Asp	Arg	Tyr	Ser	Glu	Arg	Ala	Arg	Met	Lys	Gly	Gly	Glu	Lys	Ile	Gly		
			325					330						335			
Ile	Ala	Glu	Phe	Ala	Ala	Ser	Leu	Glu	Val	Pro	Val	Ser	Asp	Leu	Leu		
	340							345					350				
Glu	Asp	Met	Phe	Ser	Leu	Phe	Asp	Glu	Ser	Gly	Ser	Gly	Glu	Val	Asp		
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Leu	Arg	Glu	Cys	Val	Val	Ala	Leu	Ser	Val	Val	Cys	Trp	Pro	Ala	Arg		
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Thr	Leu	Asp	Thr	Ile	Gln	Leu	Ala	Phe	Lys	Met	Tyr	Gly	Ala	Gln	Glu		
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			405					410						415			
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Gln	Glu	Glu	Lys	Gly	Lys	Ile	Thr	Phe	Ala	Asp	Phe	His	Arg	Phe	Ala		
	435						440					445					
Glu	Met	Tyr	Pro	Ala	Phe	Ala	Glu	Glu	Tyr	Leu	Tyr	Pro	Asp	Gln	Thr		
	450					455					460						
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<210> 3507

<211> 885

<212> DNA

<213> Homo sapiens

<400> 3507

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<210> 3508

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3508

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Cys	Ile	Ala	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile
	35					40					45				
Ala	Val	Met	Ala	Lys	Glu	Pro	Glu	Gly	Ala	Ser	Gly	Pro	Trp	Tyr	Thr
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Asp	Arg	Lys	Phe	Thr	Ile	Ser	Leu	Thr	Ala	Phe	Leu	Phe	Ile	Leu	Pro
65				70				75					80		
Leu	Ser	Ile	Pro	Arg	Glu	Ile	Gly	Phe	Gln	Lys	Tyr	Ala	Ser	Phe	Leu
		85					90					95			
Ser	Val	Val	Gly	Thr	Trp	Tyr	Val	Thr	Ala	Ile	Val	Ile	Ile	Lys	Tyr
		100					105					110			
Ile	Trp	Pro	Asp	Lys	Glu	Met	Thr	Pro	Gly	Asn	Ile	Leu	Thr	Arg	Pro
	115				120						125				
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	130				135					140					
Phe	Gln	Cys	His	Val	Ser	Ser	Val	Pro	Val	Phe	Asn	Ser	Met	Gln	Gln
145			150				155				160				
Pro	Glu	Val	Lys	Thr	Trp	Gly	Gly	Val	Val	Thr	Ala	Ala	Met	Val	Ile

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 <211> 331
 <212> DNA
 <213> Homo sapiens

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<210> 3510
 <211> 110
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Glu Gly Glu Leu Pro Thr His Glu Gln Val Phe Leu Ser Pro Pro Pro
 50 55 60
 Pro Leu Ser Pro Arg Gly Pro Gly Leu Pro Gln Lys Leu Glu Glu Arg
 65 70 75 80
 Arg Gln Leu Gly Lys Ala Pro Met Gly Gly Val Pro Trp Gly Ser Asp
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<210> 3511
 <211> 3319
 <212> DNA
 <213> Homo sapiens

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300
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360
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420
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3319

<210> 3512

<211> 462

<212> PRT

<213> Homo sapiens

<400> 3512

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 35 40 45
 Glu Gly Thr Ala Glu Lys Ser Lys Lys Leu Arg Thr Thr Asn Glu His
 50 55 60
 Ser Gln Thr Cys Asp Trp Gly Asn Leu Leu Gln Asp Ile Ile Leu Gln
 65 70 75 80
 Val Phe Lys Tyr Leu Pro Leu Leu Asp Arg Ala His Ala Ser Gln Val
 85 90 95
 Cys Arg Asn Trp Asn Gln Val Phe His Met Pro Asp Leu Trp Arg Cys
 100 105 110
 Phe Glu Phe Glu Leu Asn Gln Pro Ala Thr Ser Tyr Leu Lys Ala Thr
 115 120 125
 His Pro Glu Leu Ile Lys Gln Ile Ile Lys Arg His Ser Asn His Leu
 130 135 140
 Gln Tyr Val Ser Phe Lys Val Asp Ser Ser Lys Glu Ser Ala Glu Ala
 145 150 155 160
 Ala Cys Asp Ile Leu Ser Gln Leu Val Asn Cys Ser Leu Lys Thr Leu
 165 170 175
 Gly Leu Ile Ser Thr Ala Arg Pro Ser Phe Met Asp Leu Pro Lys Ser
 180 185 190
 His Phe Ile Ser Ala Leu Thr Val Val Phe Val Asn Ser Lys Ser Leu
 195 200 205
 Ser Ser Leu Lys Ile Asp Asp Thr Pro Val Asp Asp Pro Ser Leu Lys
 210 215 220
 Val Leu Val Ala Asn Asn Ser Asp Thr Leu Lys Leu Leu Lys Met Ser
 225 230 235 240
 Ser Cys Pro His Val Ser Pro Ala Gly Ile Leu Cys Val Ala Asp Gln
 245 250 255
 Cys His Gly Leu Arg Glu Leu Ala Leu Asn Tyr His Leu Leu Ser Asp
 260 265 270
 Glu Leu Leu Leu Ala Leu Ser Ser Glu Lys His Val Arg Leu Glu His
 275 280 285
 Leu Arg Ile Asp Val Val Ser Glu Asn Pro Gly Gln Thr His Phe His
 290 295 300
 Thr Ile Gln Lys Ser Ser Trp Asp Ala Phe Ile Arg His Ser Pro Lys
 305 310 315 320
 Val Asn Leu Val Met Tyr Phe Phe Leu Tyr Glu Glu Glu Phe Asp Pro
 325 330 335
 Phe Phe Arg Tyr Glu Ile Pro Ala Thr His Leu Tyr Phe Gly Arg Ser
 340 345 350
 Val Ser Lys Asp Val Leu Gly Arg Val Gly Met Thr Cys Pro Arg Leu

355	360	365
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370	375	380
Leu Ile Arg Ile Ala Glu Arg Cys Lys Asn Leu Ser	Ala Ile Gly Leu	
385	390	395
Gly Glu Cys Glu Val Ser Cys Ser Ala Phe Val	Glu Phe Val Lys Met	400
405	410	415
Cys Gly Gly Arg Leu Ser Gln Leu Ser Ile Met	Glu Glu Val Leu Ile	
420	425	430
Pro Asp Gln Lys Tyr Ser Leu Glu Gln Ile His	Trp Glu Val Ser Lys	
435	440	445
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<210> 3513

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 3513

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<210> 3514

<211> 484

<212> PRT

<213> Homo sapiens

<400> 3514

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Lys	Gly	Glu	Ser	Gln	Asn	Thr	Asp	Leu	Ser	Pro	Lys	Pro	Leu	Ile	Ser
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				85					90					95	
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His	Gln	Ala	Val	Pro	Ser	Gly	Glu	Arg	Pro	Tyr	Met	Cys	Val	Glu	Cys
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			245					250					255		
His	Thr	Gly	Glu	Lys	Pro	His	Arg	Cys	Asn	Glu	Cys	Gly	Lys	Thr	Phe
		260					265					270			
Ser	Val	Lys	Arg	Thr	Leu	Leu	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu
	275						280					285			
Lys	Pro	Tyr	Thr	Cys	Ser	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Asp	Arg	Ser
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Val	Leu	Ile	Gln	His	His	Asn	Val	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu
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Cys	Ser	Glu	Cys	Gly	Lys	Thr	Phe	Ser	His	Arg	Ser	Thr	Leu	Met	Asn
			325					330					335		
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		340					345					350			
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Cys	Asn	Ser	Cys	Gly	Lys	Ala	Phe	Ser	Gln	Tyr	Ser	Val	Leu	Ile	Gln
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<210> 3515

<211> 5003

<212> DNA

<213> Homo sapiens

<400> 3515

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<211> 547

<212> PRT

<213> Homo sapiens

<400> 3516

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Asp	Lys	Leu	Asn	Glu	Leu	Arg	Arg	Gln	Lys	Glu	Lys	Leu	Glu	Glu	Lys
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Ile	Met	Asp	Gln	Tyr	Lys	Phe	Tyr	Asp	Pro	Ser	Pro	Pro	Arg	Arg	Arg
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His	Ala	Ser	Arg	Pro	Ala	Ser	Leu	Asp	Ser	Gly	Arg	Thr	Ser	Thr	Ser
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 305 310 315 320
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 405 410 415
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 Pro Thr Pro Gly Thr Gln Gly Lys Ile Lys Leu Val Lys Glu Ser Ser
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 Ile His Asp Phe Leu Thr Lys Asp Ser Arg Leu Pro Ile Ser Val Asp
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<211> 342

<212> DNA

<213> Homo sapiens

<400> 3517

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<211> 99

<212> PRT

<213> Homo sapiens

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Ile Val Ala Ser Phe Val Leu Ala Gly Glu Thr Glu Ala Thr Ala Leu
 35           40           45
Gln Arg Met Pro Asp Arg Pro Thr Ser Arg Pro Leu Leu Val Arg Ala
 50           55           60
Ser Leu Ser Pro Ser Gly Leu Gly Ala Cys Asp Thr Ala Leu Arg Pro
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<212> DNA

<213> Homo sapiens

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<211> 303

<212> PRT

<213> Homo sapiens

<400> 3520

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 65 70 75 80
 Pro Thr Thr Val Pro Ser Pro Ala Ser Gly Lys Pro Ser Ser Glu Pro
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 Pro Val Thr Phe Arg Asp Pro Leu Leu Lys Gln Ser Ser Asp Ser Glu
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 Lys Asp Thr Arg Ser Leu Gly Glu Glu Pro Val Gly Gly Leu Gly Ser
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<211> 638

<212> DNA

<213> Homo sapiens

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<211> 181

<212> PRT

<213> Homo sapiens

<400> 3522

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Cys	Arg	His	Thr	Arg	Ser	Ala	Pro	Thr	Pro	Leu	Leu	Pro	Pro	Cys	Pro
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<211> 2614

<212> DNA

<213> Homo sapiens

<400> 3523

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<211> 444

<212> PRT

<213> Homo sapiens

<400> 3524

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Val	Lys	Lys	Tyr	Met	Asn	Ser	Leu	Leu	Ile	Gly	Glu	Leu	Ser	Pro	Glu
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Leu Leu Cys Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp
      165              170              175
Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp
      180              185              190
Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro
      195              200              205
Ala Ser Trp Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn
      210              215              220
Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala
      225              230              235              240
Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr
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Met Pro Tyr Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro
      260              265              270
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      275              280              285
Gln Arg Lys Lys Trp Val Asp Leu Val Trp Met Ile Thr Phe Tyr Val
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Arg Phe Phe Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu
      305              310              315
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      325              330              335
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      340              345              350
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      355              360              365
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      370              375              380
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      385              390              395              400
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      405              410              415
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<211> 1116

<212> DNA

<213> Homo sapiens

<400> 3525

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120

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180

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<211> 304

<212> PRT

<213> Homo sapiens

<400> 3526

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			20					25					30		
Arg	Lys	Gly	Ile	Cys	Glu	Tyr	His	Leu	Lys	Asn	Tyr	Ala	Ala	Ala	Leu
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Val	Val	Met	Glu	Pro	Ala	Leu	Glu	Gly	Thr	Gly	Lys	Glu	Gly	Lys	Lys
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Ala	Ser	Ser	Arg	Lys	Arg	Thr	Leu	Ala	Glu	Pro	Pro	Ala	Lys	Gly	Leu
			100					105					110		
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Ser Glu Lys Lys Lys Asp Arg Ile Asp Ala Phe Leu Arg Glu Val Asn		
165	170	175
Gln Arg Val Val Arg Val Pro Ser Val Pro Glu Thr Glu Leu Thr Asp		
180	185	190
Gln Ala Trp Leu Pro Ala Gly Val Arg Val Pro Leu His Gln Val Pro		
195	200	205
Tyr Ala Val Lys Gly Cys Phe Arg Phe Leu Pro Pro Ala Gln Val Thr		
210	215	220
Val Val Gly Ser Tyr Leu Leu Gly Thr Cys Ile Arg Pro Asp Ile Asn		
225	230	235
Val Asp Val Ala Leu Thr Met Pro Arg Glu Ile Leu Gln Asp Lys Asp		
245	250	255
Gly Leu Asn Gln Arg Tyr Phe Arg Lys Arg Ala Leu Tyr Leu Ala His		
260	265	270
Leu Ala His His Leu Ala Gln Asp Pro Leu Phe Gly Ser Val Cys Phe		
275	280	285
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<210> 3527

<211> 2838

<212> DNA

<213> Homo sapiens

<400> 3527

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<211> 281

<212> PRT

<213> Homo sapiens

<400> 3528

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Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Gly	Pro	Ile	Gln	Leu	Gln	Gln	Asp
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		245		250		255
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<211> 3026

<212> DNA

<213> Homo sapiens

<400> 3529

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<210> 3530

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3530

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		20						25					30		
Cys	Xaa	Ser	Pro	Val	Ala	Gly	Val	Ala	His	Arg	Phe	His	Ser	Thr	Cys
		35					40					45			
Gly	Lys	Asn	Val	Thr	Leu	Glu	Glu	Asp	Gly	Thr	Arg	Ala	Val	Arg	Ala
	50					55				60					
Ala	Gly	Tyr	Ala	His	Gly	Leu	Val	Phe	Ser	Thr	Lys	Glu	Leu	Arg	Ala
65				70					75					80	
Glu	Glu	Val	Phe	Glu	Val	Lys	Val	Glu	Glu	Leu	Asp	Glu	Lys	Trp	Ala
			85					90					95		
Gly	Ser	Leu	Arg	Leu	Gly	Leu	Thr	Thr	Leu	Ala	Pro	Gly	Glu	Met	Gly
			100				105						110		
Pro	Gly	Ala	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Pro	Pro	Ser	Leu	Pro	Glu
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Leu	Arg	Thr	Lys	Thr	Thr	Trp	Met	Val	Ser	Ser	Cys	Glu	Val	Arg	Arg
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145				150						155				160	
Gly	Val	Lys	Trp	Leu	Ala	Pro	Gly	Thr	Gly	Glu	Gly	Leu	Gly	Val	Glu
			165					170					175		
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		180					185					190			
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<210> 3531

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3531

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 780
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<210> 3532

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3532

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			20					25				30			
Ile	Val	Leu	Asn	Asn	Phe	Lys	Ser	Lys	Ile	Ile	Lys	Val	Lys	Val	Gln
		35				40					45				
Lys	Lys	Ala	Asp	Met	Val	Asn	Glu	Asp	Leu	Leu	Ser	Asp	Gly	Thr	Ser
		50				55					60				
Glu	Asn	Glu	Ser	Gly	Phe	Trp	Asp	Ser	Phe	Lys	Trp	Gly	Phe	Thr	Gly
65					70					75				80	
Gln	Lys	Thr	Glu	Glu	Val	Lys	Gln	Asp	Lys	Asp	Asp	Ile	Ile	Asn	Ile
			85					90						95	
Phe	Ser	Val	Ala	Ser	Gly	His	Leu	Tyr	Glu	Arg	Phe	Leu	Arg	Ile	Met
		100						105					110		
Met	Leu	Ser	Val	Leu	Lys	Asn	Thr	Lys	Thr	Pro	Val	Lys	Phe	Trp	Phe
		115					120					125			
Leu	Lys	Asn	Tyr	Leu	Ser	Pro	Thr	Phe	Lys	Glu	Phe	Ile	Pro	Tyr	Met
		130				135					140				
Ala	Asn	Glu	Tyr	Asn	Phe	Gln	Tyr	Glu	Leu	Val	Gln	Tyr	Lys	Trp	Pro
145					150					155				160	
Arg	Trp	Leu	His	Gln	Gln	Thr	Glu	Lys	Gln	Arg	Ile	Ile	Trp	Gly	Tyr
			165					170						175	
Lys	Ile	Leu	Phe	Leu	Asp	Val	Leu	Phe	Pro	Leu	Val	Val	Asp	Lys	Phe

	180		185		190										
Leu	Phe	Val	Asp	Ala	Asp	Gln	Ile	Val	Arg	Thr	Asp	Leu	Lys	Glu	Leu
	195					200						205			
Arg	Asp	Phe	Asn	Leu	Asp	Gly	Ala	Pro	Tyr	Gly	Tyr	Thr	Pro	Phe	Cys
	210					215						220			
Asp	Ser	Arg	Arg	Glu	Met	Asp	Gly	Tyr	Arg	Phe	Trp	Lys	Ser	Gly	Tyr
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<210> 3533

<211> 1151

<212> DNA

<213> Homo sapiens

<400> 3533

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 180
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 360
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 420
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<211> 313

<212> PRT

<213> Homo sapiens

<400> 3534

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		20						25					30		
Met	Asp	Asn	Leu	Pro	Ser	Ala	Ala	Ser	Pro	Leu	Glu	Gln	Asn	Pro	Ser
		35					40					45			
Lys	His	Gly	Ala	Ile	Pro	Gly	Gly	Leu	Ser	Ile	Gly	Pro	Pro	Gly	Lys
	50					55					60				
Ser	Ser	Ile	Asp	Asp	Ser	Tyr	Gly	Arg	Tyr	Asp	Leu	Ile	Gln	Asn	Ser
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Glu	Ser	Pro	Ala	Ser	Pro	Pro	Val	Ala	Val	Pro	His	Ser	Trp	Ser	Arg
				85					90					95	
Ala	Lys	Ser	Asp	Ser	Asp	Lys	Ile	Ser	Asn	Gly	Ser	Ser	Ile	Asn	Trp
			100					105					110		
Pro	Pro	Glu	Phe	His	Pro	Gly	Val	Pro	Trp	Lys	Gly	Leu	Gln	Asn	Ile
		115					120					125			
Asp	Pro	Glu	Asn	Asp	Pro	Asp	Val	Thr	Pro	Gly	Ser	Val	Pro	Thr	Gly
	130					135					140				
Pro	Thr	Ile	Asn	Thr	Thr	Ile	Gln	Asp	Val	Asn	Arg	Tyr	Leu	Leu	Lys
145					150					155				160	
Ser	Gly	Gly	Ser	Ser	Pro	Pro	Ser	Ser	Gln	Asn	Ala	Thr	Leu	Pro	Ser
				165					170					175	
Ser	Ser	Ala	Trp	Pro	Leu	Ser	Ala	Ser	Gly	Tyr	Ser	Ser	Ser	Phe	Ser
		180						185					190		
Ser	Ile	Ala	Ser	Ala	Pro	Ser	Val	Ala	Gly	Lys	Leu	Ser	Asp	Ile	Lys
	195					200					205				
Ser	Thr	Trp	Ser	Ser	Gly	Pro	Thr	Ser	His	Thr	Gln	Ala	Ser	Leu	Ser
	210					215					220				
His	Glu	Leu	Trp	Lys	Val	Pro	Arg	Asn	Ser	Thr	Ala	Pro	Thr	Arg	Pro
225					230					235				240	
Pro	Pro	Gly	Leu	Thr	Asn	Pro	Lys	Pro	Ser	Ser	Thr	Trp	Gly	Ala	Ser
				245					250					255	
Pro	Leu	Gly	Trp	Thr	Ser	Ser	Tyr	Ser	Ser	Gly	Ser	Ala	Trp	Ser	Thr
		260						265					270		
Asp	Thr	Ser	Gly	Arg	Thr	Ser	Ser	Trp	Leu	Val	Leu	Arg	Asn	Leu	Thr
	275						280					285			
Pro	Gln	Val	Gln	Tyr	Gly	Ala	Pro	Ala	Ser	Leu	Ser	Met	Ile	Gln	Gly
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<211> 723

<212> DNA

<213> Homo sapiens

<400> 3535

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 723

<210> 3536

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3536

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Ile	Ala	Gly	Gly	Asn	Phe	Glu	Asp	Gln	Leu	Arg	Glu	Glu	Val	Val	Gln
			20					25					30		
Arg	Val	Ser	Leu	Leu	Leu	Leu	Tyr	Tyr	Ile	Ile	His	Gln	Glu	Glu	Ile
			35				40					45			
Cys	Ser	Ser	Lys	Leu	Asn	Met	Ser	Asn	Lys	Glu	Tyr	Lys	Phe	Tyr	Leu
	50				55					60					
His	Ser	Leu	Leu	Ser	Leu	Arg	Gln	Asp	Glu	Asp	Ser	Ser	Phe	Leu	Ser
65					70				75					80	
Gln	Asn	Glu	Thr	Glu	Asp	Ile	Leu	Ala	Phe	Thr	Arg	Gln	Tyr	Phe	Asp
			85					90					95		
Thr	Ser	Gln	Ser	Gln	Cys	Met	Glu	Thr	Lys	Thr	Leu	Gln	Lys	Lys	Ser
			100					105					110		
Gly	Ile	Val	Ser	Ser	Glu	Gly	Ala	Asn	Glu	Ser	Thr	Leu	Pro	Gln	Leu
			115				120						125		
Ala	Ala	Met	Ile	Ile	Thr	Leu	Ser	Leu	Gln	Gly	Val	Cys	Leu	Gly	Gln
	130					135				140					
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155

160

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<211> 714
<212> DNA
<213> Homo sapiens

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<210> 3538
<211> 154
<212> PRT
<213> Homo sapiens

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 35 40 45
 Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg
 50 55 60
 Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly
 65 70 75 80
 His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg
 85 90 95
 Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

100 105 110
 Leu Pro Ser Pro Pro Thr Gln Gly His Pro Thr Ala Pro Pro Cys Pro
 115 120 125
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<210> 3539

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3539

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<210> 3540

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3540

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<210> 3541
<211> 722
<212> DNA
<213> Homo sapiens
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120
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180
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<210> 3542

<211> 153
 <212> PRT
 <213> Homo sapiens

<400> 3542
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 35 40 45
 Arg Gln Glu Pro Asp Asn Thr Gly Val Leu Leu Leu Leu Ser Ser Ile
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 His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu
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<211> 3657

<212> DNA

<213> Homo sapiens

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<211> 792

<212> PRT

<213> Homo sapiens

<400> 3546

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Val	His	Thr	Leu	Ala	Ser	Asn	Gly	Ala	Asn	Ser	Ile	Trp	Glu	His	Ser
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Leu	Leu	Asp	Pro	Ala	Gln	Val	Gln	Ser	Gly	Arg	Arg	Lys	Ala	Asn	Pro
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Asp Pro Gly Ser Pro	Asp Val Asn Gly Arg Thr	Pro Ile Asp Tyr Ala
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225	230	235
Tyr Glu Leu Thr Asp	Arg Leu Ala Phe Tyr Leu	Cys Gly Arg Lys Pro
245	250	255
Asp His Lys Asn Gly	His Tyr Ile Ile Pro	Gln Met Ala Asp Arg Ser
260	265	270
Arg Gln Lys Cys Met	Ser Gln Ser Leu Asp Leu	Ser Glu Leu Ala Lys
275	280	285
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290	295	300
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420	425	430
Arg Ala Arg Ser Met	Asp Ser Ser Asp Leu Ser	Asp Gly Ala Val Thr
435	440	445
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Lys Val Gln Gln Leu	Met Lys Val Asn Ser Ser	Leu Ser Asp Glu Leu
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<211> 1039

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3548

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 3550

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 Lys Arg Pro Arg Asp Val Asp His Arg Arg Asp Asp Pro Tyr Trp Ser
 195 200 205
 Glu Asn Lys Lys Leu Ser Leu Asp Thr Asp Ala Arg Phe Gly His Gly
 210 215 220
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 245 250 255
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 Pro Thr Ala Arg Arg Glu Asp Pro Ser Phe Glu Arg Tyr Pro Lys Asn
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Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys				
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Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg				
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Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser				
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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<210> 3553

<211> 1412

<212> DNA

<213> Homo sapiens

<400> 3553

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<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

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			165					170					175		
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		275					280					285			
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Leu	Asn	Asp	Leu	Leu	Cys	Leu	Asp	Cys	Leu	Asn	Ile	Thr	Arg	Ile	Val

				325						330					335				
Ser	Gly	Cys	Pro	Leu	Pro	Glu	Ala	Cys	Glu	Leu	Tyr	Tyr	Val	Asn	Arg				
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<210> 3555

<211> 1038

<212> DNA

<213> Homo sapiens

<400> 3555

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<210> 3556

<211> 333

<212> PRT

<213> Homo sapiens

<400> 3556

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Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile	35	40	45	
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln	50	55	60	
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Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val	85	90	95	
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp	100	105	110	
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala	115	120	125	
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val	130	135	140	
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg	145	150	155	160
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn	165	170	175	
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val	180	185	190	
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe	195	200	205	
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu	210	215	220	
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu	225	230	235	240
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu	245	250	255	
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe	260	265	270	
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala	275	280	285	
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro	290	295	300	
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro	305	310	315	320
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<211> 486

<212> DNA

<213> Homo sapiens

<400> 3557

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<210> 3558

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3558

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Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
	35						40				45				
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
	50				55				60						
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65				70					75					80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
		85					90				95				
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
		100					105				110				
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
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Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
	130				135					140					
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<210> 3559

<211> 673

<212> DNA

<213> Homo sapiens

<400> 3559

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<210> 3560

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3560

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Ala	Ile	Glu	Arg	Val	Leu	Arg	Asp	Tyr	Ser	Asp	Lys	His	Arg	Ala	Thr
				20				25					30		
Phe	Lys	Phe	Glu	Ser	Thr	Asp	Glu	Asp	Lys	Arg	Lys	Lys	Leu	Cys	Glu
				35				40					45		
Gly	Ile	Phe	Lys	Val	Leu	Ile	Lys	Asp	Ile	Pro	Thr	Thr	Cys	Gln	Val
				50				55					60		
Ser	Cys	Leu	Glu	Val	Leu	Arg	Ile	Leu	Ser	Arg	Asp	Lys	Lys	Val	Leu
Val	Pro	Val	Thr	Thr	Lys	Glu	Asn	Met	Gln	Ile	Leu	Leu	Arg	Leu	Ala
Lys	Leu	Asn	Glu	Leu	Asp	Asp	Ser	Leu	Glu	Lys	Val	Ser	Glu	Phe	Pro
Val	Ile	Val	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Ile	Val	Phe	Asn	Ser
Gln	Met	Ala	Gln	Gln	Leu	Ser	Leu	Glu	Leu	Asn	Leu	Ala	Ala	Lys	Leu
Cys	Asn	Leu	Leu	Arg	Lys	Cys	Lys	Asp	Arg	Lys	Phe	Ile	Asn	Asp	Ile

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145          150          155          160
Lys Cys Phe Asp Leu Arg Leu Leu Phe Leu Leu Ser Leu Leu His Thr
          165          170          175
Asp Ile Arg Ser Gln Leu Arg Tyr Glu Leu Gln Gly Leu Pro Leu Leu
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Thr Gln Ile
          195

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<210> 3561

<211> 523

<212> DNA

<213> Homo sapiens

<400> 3561

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120
ggagggcatg agacgcctat tgcagagctg ctcaccagaa ggtcacagga atttagaaga
180
gaagctccta cctgcccccg atcatgcacg tggccactga ggatgccaga cgagggtgatg
240
ctgggtctcat agagaatgta cccgaaggac tgtccatttc cccattgac tggcaggttc
300
tccatgttga tgggcttttc agacttgatt ggctgcgtac agaagagatg gaggggtggg
360
caggctcagg aggagtgggg tcacagacag actctgcttg ggggctggca catgggggtg
420
aagcggaggt ttggtgggtg tttctactt tgacttctca ttgcactaaa catacaactc
480
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<210> 3562

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3562

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Met His Val Ala Thr Glu Asp Ala Arg Arg Gly Asp Ala Gly Leu Ile
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Glu Asn Val Pro Glu Gly Leu Ser Ile Ser Pro Ile Asp Trp Gln Val
          20          25          30
Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu
          35          40          45
Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser
          50          55          60
Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe
          65          70          75          80
Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp
          85          90          95
Gly Glu Glu Glu Trp Gly Lys Gly Val Cys
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<210> 3563

<211> 359

<212> DNA

<213> Homo sapiens

<400> 3563

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 240
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<210> 3564

<211> 82

<212> PRT

<213> Homo sapiens

<400> 3564

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Gly	Pro	Pro	Val	Gly	Ala	Gly	Leu	Asp	Ala	Glu	Gln	Arg	Thr	Val	Phe
			20					25					30		
Ala	Phe	Val	Leu	Cys	Leu	Leu	Val	Val	Leu	Val	Leu	Leu	Met	Val	Arg
		35					40					45			
Cys	Val	Arg	Ile	Leu	Leu	Asp	Pro	Tyr	Ser	Arg	Met	Pro	Ala	Ser	Ser
		50				55					60				
Trp	Thr	Asp	His	Lys	Glu	Ala	Leu	Glu	Arg	Gly	Gln	Phe	Asp	Tyr	Ala
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Leu	Val														

<210> 3565

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3565

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 180
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 240
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 300

cgggaggcgg ccctggagcg accccggacg actaagcggg aacgggacca gctgtactac
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 420
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 480
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<210> 3566

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3566

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Gln	Asn	Ser	Ser	Arg	Glu	Gln	Ala	Gln	Glu	Thr	Phe	Arg	Ala	Ala	Gly
			20					25					30		
Arg	Ala	Thr	Pro	Gln	Glu	Val	Gly	Arg	Thr	Ser	Ala	His	Phe	Lys	Ser
		35					40					45			
Gln	Lys	Pro	Pro	Phe	Pro	Gly	Ala	Arg	Ala	Val	Pro	Arg	Tyr	Ala	Arg
	50					55					60				
Arg	Glu	Pro	Gly	Arg	Ala	Ala	Lys	Met	Ser	Gln	Pro	Lys	Lys	Arg	Lys
65				70					75					80	
Leu	Glu	Ser	Gly	Gly	Gly	Ala	Glu	Gly	Gly	Glu	Gly	Thr	Glu	Glu	Glu
			85					90						95	
Asp	Gly	Ala	Glu	Arg	Glu	Ala	Ala	Leu	Glu	Arg	Pro	Arg	Thr	Thr	Lys
			100					105					110		
Arg	Glu	Arg	Asp	Gln	Leu	Tyr	Tyr	Glu	Cys	Tyr	Ser	Asp	Val	Ser	Val
		115				120						125			
His	Glu	Glu	Met	Ile	Ala	Asp	Arg	Val	Arg	Thr	Asp	Ala	Tyr	Arg	Trp
	130					135					140				
Val	Ser	Leu	Arg	Asn	Trp	Ala	Ala	Leu	Arg	Gly	Lys	Thr	Val	Leu	Asp
145				150					155					160	
Val	Gly	Ala	Gly	Thr	Gly	Ile	Leu	Ser	Ile	Phe	Cys	Ala	Gln	Ala	Gly
			165					170					175		
Ala	Arg	Arg	Val	Tyr	Ala	Val	Glu	Ala	Ser	Ala	Ile	Trp	Gln	Gln	Ala
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Arg															

<210> 3567

<211> 2811

<212> DNA

<213> Homo sapiens

<400> 3567

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ataagcaggt ggaagagatc ctccgtctgg agaaagaaat cgaggacctg cagcgcatga
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420
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480
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<210> 3568

<211> 869

<212> PRT

<213> Homo sapiens

<400> 3568

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			20				25						30		
Phe	Gln	Lys	Gln	Leu	Arg	Gly	Gln	Ile	Ala	Arg	Arg	Val	Tyr	Arg	Gln
		35				40						45			
Leu	Leu	Ala	Glu	Lys	Arg	Glu	Gln	Glu	Glu	Lys	Lys	Lys	Gln	Glu	Glu
	50					55					60				
Glu	Glu	Lys	Lys	Lys	Arg	Glu	Glu	Glu	Glu	Arg	Glu	Arg	Glu	Arg	Glu
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Arg	Arg	Glu	Ala	Glu	Leu	Arg	Ala	Gln	Gln	Glu	Glu	Thr	Arg	Lys	

										85				90				95			
Gln	Gln	Glu	Leu	Glu	Ala	Leu	Gln	Lys	Ser	Gln	Lys	Glu	Ala	Glu	Leu						
				100					105					110							
Thr	Arg	Glu	Leu	Glu	Lys	Gln	Lys	Glu	Asn	Lys	Gln	Val	Glu	Glu	Ile						
				115					120					125							
Leu	Arg	Leu	Glu	Lys	Glu	Ile	Glu	Asp	Leu	Gln	Arg	Met	Lys	Glu	Gln						
				130					135					140							
Gln	Glu	Leu	Ser	Leu	Thr	Glu	Ala	Ser	Leu	Gln	Lys	Leu	Gln	Glu	Arg						
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Gln	Glu	Phe	Leu	Glu	Ser	Leu	Asn	Phe	Asp	Glu	Ile	Asp	Glu	Cys	Val						
				180					185					190							
Arg	Asn	Ile	Glu	Arg	Ser	Leu	Ser	Gly	Gly	Ser	Glu	Phe	Ser	Ser	Glu						
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Pro	Tyr	Pro	Glu	Glu	Glu	Val	Asp	Glu	Gly	Phe	Glu	Ala	Asp	Asp	Asp						
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Arg	Thr	Ser	Gly	Ile	Arg	Thr	Ser	Asp	Asp	Ser	Ser	Glu	Glu	Asp	Pro						
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Tyr	Met	Asn	Asp	Thr	Val	Val	Pro	Thr	Ser	Pro	Ser	Ala	Asp	Ser	Thr						
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Pro	Ser	Pro	Asp	Gly	Asp	Tyr	Asp	Tyr	Asp	Gln	Asp	Asp	Tyr	Glu	Asp						
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Asp	Ser	Glu	Glu	Asp	Phe	Asp	Ser	Arg	Phe	Asp	Thr	Asp	Asp	Glu	Leu						
385					390					395					400						
Ser	Tyr	Arg	Arg	Asp	Ser	Val	Tyr	Ser	Cys	Val	Thr	Leu	Pro	Tyr	Phe						
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His	Ser	Phe	Leu	Tyr	Met	Lys	Gly	Gly	Leu	Met	Asn	Ser	Trp	Lys	Arg						
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Arg	Trp	Cys	Val	Leu	Lys	Asp	Glu	Thr	Phe	Leu	Trp	Phe	Arg	Ser	Lys						
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Gln Val His Ala Ser Thr Asp	Gln Glu Ile Gln Glu Met	His Asp Glu
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Gln Ala Asn Pro Gln Asn Ala Val Gly Thr	Leu Asp Val Gly	Leu Ile
565	570	575
Asp Ser Val Cys Ala Ser Asp Ser Pro Asp Arg	Pro Asn Ser Phe Val	
580	585	590
Ile Ile Thr Ala Asn Arg Val Leu His Cys Asn Ala Asp Thr Pro Glu		
595	600	605
Glu Met His His Trp Ile Thr Leu Leu Gln Arg Ser Lys Gly Asp Thr		
610	615	620
Arg Val Glu Gly Gln Glu Phe Ile Val Arg Gly Trp Leu His Lys Glu		
625	630	635
Val Lys Asn Ser Pro Lys Met Ser Ser Leu Lys Leu Lys Lys Arg Trp		
645	650	655
Phe Val Leu Thr His Asn Ser Leu Asp Tyr Tyr Lys Ser Ser Glu Lys		
660	665	670
Asn Ala Leu Lys Leu Gly Thr Leu Val Leu Asn Ser Leu Cys Ser Val		
675	680	685
Val Pro Pro Asp Glu Lys Ile Phe Lys Glu Thr Gly Tyr Trp Asn Val		
690	695	700
Thr Val Tyr Gly Arg Lys His Cys Tyr Arg Leu Tyr Thr Lys Leu Leu		
705	710	715
Asn Glu Ala Thr Arg Trp Ser Ser Val Ser Gln Asn Val Thr Asp Thr		
725	730	735
Lys Ala Pro Ile Asp Thr Pro Thr Gln Gln Leu Ile Gln Asp Ile Lys		
740	745	750
Glu Asn Cys Leu Asn Ser Asp Val Val Glu Gln Ile Tyr Lys Arg Asn		
755	760	765
Pro Ile Leu Arg Tyr Thr His His Pro Leu His Ser Pro Leu Leu Pro		
770	775	780
Leu Pro Tyr Gly Asp Ile Asn Leu Asn Leu Leu Lys Asp Lys Gly Tyr		
785	790	795
Thr Thr Leu Gln Asp Glu Ala Ile Lys Ile Phe Asn Ser Leu Gln Gln		
805	810	815
Leu Glu Ser Met Ser Asp Pro Ile Pro Ile Ile Gln Gly Ile Leu Gln		
820	825	830
Thr Gly His Asp Leu Arg Pro Leu Arg Asp Glu Leu Tyr Cys Gln Leu		
835	840	845
Ile Lys Gln Thr Asn Lys Val Pro His Pro Gly Ser Val Gly Asn Leu		
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Tyr Ser Trp Gln Ile		
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<210> 3569

<211> 5070

<212> DNA

<213> Homo sapiens

<400> 3569

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<210> 3570

<211> 893

<212> PRT

<213> Homo sapiens

<400> 3570

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			20					25					30		
Arg	Ala	Pro	Ser	Pro	Pro	Trp	Pro	Pro	Gln	Gly	Pro	Leu	Ser	Pro	Gly
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Pro	Gly	Ser	Leu	Pro	Leu	Ser	Ile	Ala	Arg	Val	Gln	Thr	Pro	Pro	Trp
	50					55					60				
His	Pro	Pro	Gly	Ala	Pro	Ser	Pro	Gly	Leu	Leu	Gln	Asp	Ser	Asp	Ser
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Leu	Ser	Gly	Ser	Tyr	Leu	Asp	Pro	Asn	Tyr	Gln	Ser	Ile	Lys	Trp	Gln
			85					90					95		
Pro	His	Gln	Gln	Asn	Lys	Trp	Ala	Thr	Leu	Tyr	Asp	Ala	Asn	Tyr	Lys
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Glu	Leu	Pro	Met	Leu	Thr	Tyr	Arg	Val	Asp	Ala	Asp	Lys	Gly	Phe	Asn
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Phe	Ser	Val	Gly	Asp	Asp	Ala	Phe	Val	Cys	Gln	Lys	Lys	Asn	His	Phe
	130					135					140				
Gln	Val	Thr	Val	Tyr	Ile	Gly	Met	Leu	Gly	Glu	Pro	Lys	Tyr	Val	Lys
145				150					155					160	
Thr	Pro	Glu	Gly	Leu	Lys	Pro	Leu	Asp	Cys	Phe	Tyr	Leu	Lys	Leu	His
			165					170					175		
Gly	Val	Lys	Leu	Glu	Ala	Leu	Asn	Gln	Ser	Ile	Asn	Ile	Glu	Gln	Ser
		180						185					190		
Gln	Ser	Asp	Arg	Ser	Lys	Arg	Pro	Phe	Asn	Pro	Val	Thr	Val	Asn	Leu
		195					200						205		
Pro	Pro	Glu	Gln	Val	Thr	Lys	Val	Thr	Val	Gly	Arg	Leu	His	Phe	Ser
	210					215					220				
Glu	Thr	Thr	Ala	Asn	Asn	Met	Arg	Lys	Lys	Gly	Lys	Pro	Asn	Pro	Asp
225				230						235				240	
Gln	Arg	Tyr	Phe	Met	Leu	Val	Val	Ala	Leu	Gln	Ala	His	Ala	Gln	Asn
			245					250					255		
Gln	Asn	Tyr	Thr	Leu	Ala	Ala	Gln	Ile	Ser	Glu	Arg	Ile	Ile	Val	Arg
		260						265					270		
Ala	Ser	Asn	Pro	Gly	Gln	Phe	Glu	Ser	Asp	Ser	Asp	Val	Leu	Trp	Gln
		275						280				285			
Arg	Ala	Gln	Val	Pro	Asp	Thr	Val	Phe	His	His	Gly	Arg	Val	Gly	Ile
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Asn	Thr	Asp	Arg	Pro	Asp	Glu	Ala	Leu	Val	Val	His	Gly	Asn	Val	Lys
305				310						315				320	
Val	Met	Gly	Ser	Leu	Met	His	Pro	Ser	Asp	Leu	Arg	Ala	Lys	Glu	His
			325						330				335		
Val	Gln	Glu	Val	Asp	Thr	Thr	Glu	Gln	Leu	Lys	Arg	Ile	Ser	Arg	Met

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 Ile Glu Ala Thr Ala Pro Glu Thr Gly Val Ile Ala Gln Glu Val Lys
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 Glu Ile Leu Pro Glu Ala Val Lys Asp Thr Gly Asp Met Val Phe Ala
 385 390 395 400
 Asn Gly Lys Thr Ile Glu Asn Phe Leu Val Val Asn Lys Glu Arg Ile
 405 410 415
 Phe Met Glu Asn Val Gly Ala Val Lys Glu Leu Cys Lys Leu Thr Asp
 420 425 430
 Asn Leu Glu Thr Arg Ile Asp Glu Leu Glu Arg Trp Ser His Lys Leu
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 Ala Lys Leu Arg Arg Leu Asp Ser Leu Lys Ser Thr Gly Ser Ser Gly
 450 455 460
 Ala Phe Ser His Ala Gly Ser Gln Phe Ser Arg Ala Gly Ser Val Pro
 465 470 475 480
 His Lys Lys Arg Pro Pro Lys Val Ala Ser Lys Ser Ser Val Val
 485 490 495
 Pro Asp Gln Ala Cys Ile Ser Gln Arg Phe Leu Gln Gly Thr Ile Ile
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 Ala Leu Val Val Val Met Ala Phe Ser Val Val Ser Met Ser Thr Leu
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 Tyr Val Leu Ser Leu Arg Thr Glu Glu Asp Leu Val Asp Thr Asp Gly
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 Ser Phe Ala Val Ser Thr Ser Cys Leu Leu Ala Leu Leu Arg Pro Gln
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 Pro Pro Gly Gly Ser Glu Ala Leu Cys Pro Trp Ser Ser Gln Ser Phe
 565 570 575
 Gly Thr Thr Gln Leu Arg Gln Ser Pro Leu Thr Thr Gly Leu Pro Gly
 580 585 590
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 595 600 605
 Pro Gly Ser Ala Val Arg Thr Leu Asp Met Cys Ser Ser His Pro Cys
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 Pro Val Ile Cys Cys Ser Ser Pro Thr Thr Asn Pro Thr Thr Gly Pro
 625 630 635 640
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 Val Pro Phe Pro Gly Gly Gln Gly Lys Ala Lys Asn Ser Pro Ser Leu
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 Gly Phe His Gly Arg Ala Arg Arg Gly Ala Leu Gln Ser Ser Val Gly
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 Pro Ala Glu Pro Thr Trp Ala Gln Gly Gln Ser Ala Ser Leu Leu Ala
 740 745 750
 Glu Pro Val Pro Ser Leu Thr Ser Ile Gln Val Leu Glu Asn Ser Met
 755 760 765
 Ser Ile Thr Ser Gln Tyr Cys Ala Pro Gly Asp Ala Cys Arg Pro Gly

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785		790		800
Ser Leu Thr Leu Gln Met Asn Ser Ser Ser Pro Val Ser Val Val Leu				
	805		810	815
Cys Ser Leu Arg Ser Lys Glu Glu Pro Cys Glu Glu Gly Ser Leu Pro				
	820		825	830
Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp				
	835		840	845
Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val				
	850		855	860
Ala Leu Leu Gly Gln Ala Asn Cys Ser Ser Glu Ala Leu Ala Gln Pro				
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Ala Thr Asp Tyr His Phe His Phe Tyr Arg Leu Cys Asp				
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<210> 3571

<211> 528

<212> DNA

<213> Homo sapiens

<400> 3571

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<210> 3572

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3572

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Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu			
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Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His			

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<210> 3574

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3574

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			20					25					30		
Ile	Asn	Pro	Ser	His	Thr	His	Ser	Pro	Ile	Phe	Ser	Ile	His	Ser	Gly
	35						40					45			
Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
	50					55				60					
Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
65					70					75					80
Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
				85				90						95	
Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
			100					105					110		
Arg	Gly	Gly	Ser	Pro	Ala	Val	Phe	Asp	Trp	Phe	Phe	Glu	Ala	Ala	Cys
	115						120					125			
Pro	Ala	Ser	Val	Gln	Glu	Asp	Pro	Pro	Ile	Leu	Arg	Gln	Phe	Pro	Pro
	130					135					140				
Asp	Phe	Arg	Asp	Gln	Glu	Ala	Met	Gln	Met	Val	Pro	Lys	Phe	Cys	Phe
145					150					155					160
Pro	Phe	Asp	Val	Glu	Arg	Gly	Pro	Pro	Ser	Pro	Ala	Val	Gln	His	Phe
				165				170						175	
Thr	Phe	Ala	Leu	Thr	Asp	Leu	Ala	Gly	Asn	Arg	Arg	Phe	Gly	Phe	Cys
			180					185					190		
Arg	Leu	Arg	Ala	Gly	Thr	Gln	Ser	Cys	Leu	Cys	Ile	Leu	Ser	His	Leu
	195					200						205			
Pro	Trp	Phe	Glu	Val	Phe	Tyr	Lys	Leu	Leu	Asn	Thr	Val	Gly	Asp	Leu
	210					215					220				
Leu	Ala	Gln	Asp	Gln	Val	Thr	Glu	Ala	Glu	Glu	Leu	Leu	Gln	Asn	Leu
225				230						235					240
Phe	Gln	Gln	Ser	Leu	Ser	Gly	Pro	Gln	Ala	Ser	Val	Gly	Leu	Glu	Leu
				245					250					255	
Gly	Ser	Gly	Val	Thr	Val	Ser	Ser	Gly	Gln	Gly	Ile	Pro	Pro	Pro	Thr
			260					265					270		
Arg	Gly	Asn	Ser	Lys	Pro	Leu	Ser	Cys	Phe	Val	Ala	Pro	Asp	Ser	Gly
	275					280						285			
Arg	Leu	Pro	Ser	Ile	Pro	Glu	Asn	Arg	Asn	Leu	Thr	Glu	Leu	Val	Val
	290					295					300				
Ala	Val	Thr	Asp	Glu	Asn	Ile	Val	Gly	Leu	Phe	Ala	Ala	Leu	Leu	Ala
305					310					315					320
Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg
				325					330					335	
Gly	Pro	Pro	Gly	Arg	Gly	Gly	Ser	Arg	Ala	Trp	Leu	Arg	Pro	Gly	Gly
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355

360

<210> 3575

<211> 769

<212> DNA

<213> Homo sapiens

<400> 3575

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<210> 3576

<211> 205

<212> PRT

<213> Homo sapiens

<400> 3576

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 Ser Thr Thr Lys Gln Asp Lys Ile Ile Ser Phe Ile Phe Ala Leu Thr
 35 40 45
 Ile Pro Lys Met Met Phe Leu Pro Asn Glu Cys Leu His Phe Ile Phe
 50 55 60
 Gln Thr Cys Ser Leu Lys Pro Ile Ile Ala Pro Leu Arg Asn Ile Phe
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 Thr Ser Ser Ser Gly Met Ser Leu Ser Ala Gly Ser Ser Pro Leu His
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 Ser Pro Lys Ile Thr Pro His Thr Ser Pro Ala Pro Arg Arg Arg Ser

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180
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1020

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<210> 3578

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3578

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		20					25						30		
Ile	Ser	Glu	His	Phe	His	Pro	Thr	Val	Ile	Gly	Glu	Ser	Met	Tyr	Gly
	35					40					45				
Asp	Phe	Glu	Glu	Ala	Phe	Asp	His	Leu	Gln	Asn	Arg	Leu	Ile	Ala	Thr
50					55					60					
Lys	Asn	Pro	Glu	Glu	Ile	Arg	Gly	Gly	Gly	Leu	Leu	Lys	Tyr	Ser	Asn
65					70					75				80	
Leu	Leu	Val	Arg	Asp	Phe	Arg	Pro	Thr	Asp	Gln	Glu	Glu	Ile	Lys	Thr
			85					90					95		
Leu	Glu	Arg	Tyr	Met	Cys	Ser	Arg	Phe	Phe	Ile	Asp	Phe	Pro	Asp	Ile
	100						105						110		
Leu	Glu	Gln	Gln	Arg	Lys	Leu	Glu	Thr	Tyr	Leu	Gln	Asn	His	Phe	Ala
	115					120						125			
Glu	Glu	Glu	Arg	Ser	Lys	Tyr	Asp	Tyr	Leu	Met	Ile	Leu	Arg	Arg	Val
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Val	Asn	Glu	Ser	Thr	Val	Cys	Leu	Met	Gly	His	Glu	Arg	Arg	Gln	Thr
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Leu	Asn	Leu	Ile	Ser	Leu	Leu	Ala	Leu	Arg	Val	Leu	Gly	Gly	Thr	Lys
			165					170						175	
His	His	Pro	Pro	Val	Pro	Pro	Arg	Ser	Pro	Val	Thr	Thr	Ser	Gly	Pro
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Leu	Ser	Gln													
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<210> 3579

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3579

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 180

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 300
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 420
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 480
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<212> DNA

<213> Homo sapiens

<400> 3581

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<211> 138

<212> PRT

<213> Homo sapiens

<400> 3582

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<211> 1554

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3584

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<212> PRT

<213> Homo sapiens

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2746

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<212> DNA

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<211> 499

<212> PRT

<213> Homo sapiens

<400> 3588

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Asn	Ala	Thr	Ile	Met	Val	Val	Ser	Val	Thr	Ala	Ser	Thr	Thr	Gln	Gly
			165					170						175	
Gln	Gln	Leu	Ser	Glu	Glu	Glu	Leu	Glu	Arg	Leu	Glu	Glu	Ala	Cys	Asp

	180		185		190										
Met	Ala	Leu	Glu	Leu	Asn	Ala	Ser	Lys	His	Arg	Ile	Tyr	Glu	Tyr	Val
	195		200		205										
Glu	Ser	Arg	Met	Ser	Phe	Ile	Ala	Pro	Asn	Leu	Ser	Ile	Ile	Ile	Gly
	210		215		220										
Ala	Ser	Thr	Ala	Ala	Lys	Ile	Met	Gly	Val	Ala	Gly	Gly	Leu	Thr	Asn
225			230		235					240					
Leu	Ser	Lys	Met	Pro	Ala	Cys	Asn	Ile	Met	Leu	Leu	Gly	Ala	Gln	Arg
			245		250									255	
Lys	Thr	Leu	Ser	Gly	Phe	Ser	Ser	Thr	Ser	Val	Leu	Pro	His	Thr	Gly
			260		265									270	
Tyr	Ile	Tyr	His	Ser	Asp	Ile	Val	Gln	Ser	Leu	Pro	Pro	Asp	Leu	Arg
	275		280		285										
Arg	Lys	Ala	Ala	Arg	Leu	Val	Ala	Ala	Lys	Cys	Thr	Leu	Ala	Ala	Arg
	290		295		300										
Val	Asp	Ser	Phe	His	Glu	Ser	Thr	Glu	Gly	Lys	Val	Gly	Tyr	Glu	Leu
305			310		315									320	
Lys	Asp	Glu	Ile	Glu	Arg	Lys	Phe	Asp	Lys	Trp	Gln	Glu	Pro	Pro	Pro
			325		330									335	
Val	Lys	Gln	Val	Lys	Pro	Leu	Pro	Ala	Pro	Leu	Asp	Gly	Gln	Arg	Lys
			340		345									350	
Lys	Arg	Gly	Gly	Arg	Arg	Tyr	Arg	Lys	Met	Lys	Glu	Arg	Leu	Gly	Leu
	355		360		365										
Thr	Glu	Ile	Arg	Lys	Gln	Ala	Asn	Arg	Met	Ser	Phe	Gly	Glu	Ile	Glu
	370		375		380										
Glu	Asp	Ala	Tyr	Gln	Glu	Asp	Leu	Gly	Phe	Ser	Leu	Gly	His	Leu	Gly
385			390		395									400	
Lys	Ser	Gly	Ser	Gly	Arg	Val	Arg	Gln	Thr	Gln	Val	Asn	Glu	Ala	Thr
			405		410									415	
Lys	Ala	Arg	Ile	Ser	Lys	Thr	Leu	Gln	Arg	Thr	Leu	Gln	Lys	Gln	Ser
			420		425									430	
Val	Val	Tyr	Gly	Gly	Lys	Ser	Thr	Ile	Arg	Asp	Arg	Ser	Ser	Gly	Thr
	435		440		445										
Ala	Ser	Ser	Val	Ala	Phe	Thr	Pro	Leu	Gln	Gly	Leu	Glu	Ile	Val	Asn
	450		455		460										
Pro	Gln	Ala	Ala	Glu	Lys	Lys	Val	Ala	Glu	Ala	Asn	Gln	Lys	Tyr	Phe
465			470		475									480	
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Met	Ser	Thr													

<210> 3589

<211> 675

<212> DNA

<213> Homo sapiens

<400> 3589

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120

aatagttctt gaccaggtc cctccatgaa cctcgaagct gaccagcca taggggggat
180

accttcattt cagtcaccagc agcctccccc aaccagtcag ggtccctgaa gagcatctgg
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 480
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 540
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 675

<210> 3590

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3590

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Asn	Leu	Ile	Leu	Pro	Ser	Pro	Asp	Ser	Ser	Pro	Gln	Ala	Lys	Pro	Leu
			20					25					30		
Asp	Pro	Met	Ser	Pro	Phe	His	Leu	Ser	Ser	Val	Ile	Leu	Cys	Arg	Pro
		35					40					45			
Ser	Ala	Trp	Pro	Cys	Leu	Arg	Ser	Ser	Ser	Pro	Pro	Ala	Ala	Gln	Gly
		50				55					60				
Ser	Phe	Val	Ser	Ala	Gln	Glu	Gly	Pro	Tyr	Asn	Pro	Ser	Trp	Leu	Trp
65					70				75					80	
Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
				85					90					95	
Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
			100					105					110		
Phe	Thr	His	Ile	Ser											
			115												

<210> 3591

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3591

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 120
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 180

cacattgatt ctgggaaaac tacattaaca gaacgagtc tttactacac tggcagaatt
 240
 gcaaagatgc atgaggtgaa aggtaaagat ggagttgggtg ctgtcatgga ttccatggaa
 300
 ctagagagac aaagaggaat cactattcag tcagcagcca cttacaccat gtggaaagat
 360
 gtcaatatta acattataga tactcctggg catgtggact tcacaataga agtggaaagg
 420
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 480
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 aacaaattgg accgaatggg ctccaaccca gccagggccc tgcagcaa at gaggtctaaa
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 attgtagat
 669

<210> 3592

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3592

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Ala	Ala	Leu	Gly	Arg	Gly	Arg	Ala	Pro	Ala	Ser	Leu	Gly	Trp	Gln	Arg
		20						25					30		
Lys	Gln	Val	Asn	Trp	Lys	Ala	Cys	Arg	Trp	Ser	Ser	Ser	Gly	Val	Ile
		35					40					45			
Pro	Asn	Glu	Lys	Ile	Arg	Asn	Ile	Gly	Ile	Ser	Ala	His	Ile	Asp	Ser
	50					55					60				
Gly	Lys	Thr	Thr	Leu	Thr	Glu	Arg	Val	Leu	Tyr	Tyr	Thr	Gly	Arg	Ile
65				70					75					80	
Ala	Lys	Met	His	Glu	Val	Lys	Gly	Lys	Asp	Gly	Val	Gly	Ala	Val	Met
			85						90					95	
Asp	Ser	Met	Glu	Leu	Glu	Arg	Gln	Arg	Gly	Ile	Thr	Ile	Gln	Ser	Ala
		100						105					110		
Ala	Thr	Tyr	Thr	Met	Trp	Lys	Asp	Val	Asn	Ile	Asn	Ile	Ile	Asp	Thr
	115					120						125			
Pro	Gly	His	Val	Asp	Phe	Thr	Ile	Glu	Val	Glu	Arg	Ala	Leu	Arg	Val
	130				135						140				
Leu	Asp	Gly	Ala	Val	Leu	Val	Leu	Cys	Ala	Val	Gly	Gly	Val	Gln	Cys
145				150					155					160	
Gln	Thr	Met	Thr	Val	Asn	Arg	Gln	Met	Lys	Arg	Tyr	Asn	Val	Pro	Phe
			165					170						175	
Leu	Thr	Phe	Ile	Asn	Lys	Leu	Asp	Arg	Met	Gly	Ser	Asn	Pro	Ala	Arg
		180					185						190		
Ala	Leu	Gln	Gln	Met	Arg	Ser	Lys	Leu	Asn	His	Asn	Ala	Ala	Phe	Met
	195					200					205				
Gln	Ile	Pro	Met	Gly	Leu	Glu	Gly	Asn	Phe	Lys	Gly	Ile	Val	Asp	
	210					215					220				

<210> 3593
 <211> 1005
 <212> DNA
 <213> Homo sapiens

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 120
 ccctcaagca acggatcccc atggcgcttg ttgggcgctg tgtgctgca ggggccacct
 180
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 240
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 300
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 360
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 420
 acagaagctg atgaaaagaa tgaccgaaca tccctgaaca ggaagctaga caggaacctt
 480
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 540
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 660
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 720
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 780
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 840
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<210> 3594
 <211> 282
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Arg Ser Leu Ala Leu Ala Ala Ala Pro Ser Ser Asn Gly Ser Pro Trp
 35 40 45
 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

50 55 60
 Pro Leu Thr Pro Leu Gln Glu Glu Met Ala Ser Leu Leu Gln Gln Ile
 65 70 75 80
 Glu Ile Glu Arg Ser Leu Tyr Ser Asp His Glu Leu Arg Ala Leu Asp
 85 90 95
 Glu Asn Gln Arg Leu Ala Lys Lys Lys Ala Asp Leu His Asp Glu Glu
 100 105 110
 Asp Glu Gln Asp Ile Leu Leu Ala Gln Asp Leu Glu Asp Met Trp Glu
 115 120 125
 Gln Lys Phe Leu Gln Phe Lys Leu Gly Ala Arg Ile Thr Glu Ala Asp
 130 135 140
 Glu Lys Asn Asp Arg Thr Ser Leu Asn Arg Lys Leu Asp Arg Asn Leu
 145 150 155 160
 Val Leu Leu Val Arg Glu Lys Phe Gly Asp Gln Asp Val Trp Ile Leu
 165 170 175
 Pro Gln Ala Glu Trp Gln Pro Gly Glu Thr Leu Arg Gly Thr Ala Glu
 180 185 190
 Arg Thr Leu Ala Thr Leu Ser Glu Asn Asn Met Glu Ala Lys Phe Leu
 195 200 205
 Gly Asn Ala Pro Cys Gly His Tyr Thr Phe Lys Phe Pro Gln Ala Met
 210 215 220
 Arg Thr Glu Ser Asn Leu Gly Ala Lys Val Phe Phe Phe Lys Ala Leu
 225 230 235 240
 Leu Leu Thr Gly Asp Phe Ser Gln Ala Gly Asn Lys Gly His His Val
 245 250 255
 Trp Val Thr Lys Asp Glu Leu Gly Asp Tyr Leu Lys Pro Lys Tyr Leu
 260 265 270
 Ala Gln Val Arg Arg Phe Val Ser Asp Leu
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<210> 3595

<211> 1903

<212> DNA

<213> Homo sapiens

<400> 3595

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 180
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 240
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 300
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cttacctttc tggaggagga tgacaaggac ctgtacatcc tctggaaggg gccctccttc
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720
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960
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1800
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1903

<210> 3596

<211> 496

<212> PRT

<213> Homo sapiens

<400> 3596

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Gln Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu			
35	40	45	
Ala His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro Ile			
50	55	60	
Val Glu Ser Tyr Ile Gly Phe Ile Glu Ser Tyr Arg Asp Pro Phe Gly			
65	70	75	80
Ser Arg Gly Glu Phe Glu Gly Phe Val Ala Val Val Asn Lys Ala Met			
85	90	95	
Ser Ala Lys Phe Glu Arg Leu Val Ala Ser Ala Glu Gln Leu Leu Lys			
100	105	110	
Glu Leu Pro Trp Pro Pro Thr Phe Glu Lys Asp Lys Phe Leu Thr Pro			
115	120	125	
Asp Phe Thr Ser Leu Asp Val Leu Thr Phe Ala Gly Ser Gly Ile Pro			
130	135	140	
Ala Gly Ile Asn Ile Pro Asn Tyr Asp Asp Leu Arg Gln Thr Glu Gly			
145	150	155	160
Phe Lys Asn Val Ser Leu Gly Asn Val Leu Ala Val Ala Tyr Ala Thr			
165	170	175	
Gln Arg Glu Lys Leu Thr Phe Leu Glu Glu Asp Asp Lys Asp Leu Tyr			
180	185	190	
Ile Leu Trp Lys Gly Pro Ser Phe Asp Val Gln Val Gly Leu His Glu			
195	200	205	
Leu Leu Gly His Gly Ser Gly Lys Leu Phe Val Gln Asp Glu Lys Gly			
210	215	220	
Ala Phe Asn Phe Asp Gln Glu Thr Val Ile Asn Pro Glu Thr Gly Glu			
225	230	235	240
Gln Ile Gln Ser Trp Tyr Arg Ser Gly Glu Thr Trp Asp Ser Lys Phe			
245	250	255	
Ser Thr Ile Ala Ser Ser Tyr Glu Glu Cys Arg Ala Glu Ser Val Gly			
260	265	270	
Leu Tyr Leu Cys Leu His Pro Gln Val Leu Glu Ile Phe Gly Phe Glu			
275	280	285	
Gly Ala Asp Ala Glu Asp Val Ile Tyr Val Asn Trp Leu Asn Met Val			
290	295	300	
Arg Ala Gly Leu Leu Ala Leu Glu Phe Tyr Thr Pro Glu Ala Phe Asn			
305	310	315	320
Trp Arg Gln Ala His Met Gln Ala Arg Phe Val Ile Leu Arg Val Leu			
325	330	335	
Leu Glu Ala Gly Glu Gly Leu Val Thr Ile Thr Pro Thr Thr Gly Ser			
340	345	350	
Asp Gly Arg Pro Asp Ala Arg Val Arg Leu Asp Arg Ser Lys Ile Arg			
355	360	365	
Ser Val Gly Lys Pro Ala Leu Glu Arg Phe Leu Arg Arg Leu Gln Val			
370	375	380	
Leu Lys Ser Thr Gly Asp Val Ala Gly Gly Arg Ala Leu Tyr Glu Gly			
385	390	395	400
Tyr Ala Thr Val Thr Asp Ala Pro Pro Glu Cys Phe Leu Thr Leu Arg			
405	410	415	
Asp Thr Val Leu Leu Arg Lys Glu Ser Arg Lys Leu Ile Val Gln Pro			
420	425	430	
Asn Thr Arg Leu Glu Gly Asn Gly Ser Asp Val Gln Leu Leu Glu Tyr			

	435		440		445	
Glu	Ala	Ser	Ala	Ala	Gly	Leu
	450		455		460	
Glu	Asp	Gly	Pro	Glu	Leu	Glu
465			470		475	
Asp	Ala	Arg	Phe	Trp	Lys	Gly
	485		490		495	

<210> 3597

<211> 1090

<212> DNA

<213> Homo sapiens

<400> 3597

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660
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780
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<210> 3598

<211> 159
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg
 50 55 60
 Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys
 65 70 75 80
 His Glu Asp Asn Arg Arg Ser Trp Ala Ser Pro Val Tyr Thr Glu Ala
 85 90 95
 Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu
 100 105 110
 Asp Val Gln Asn Leu Arg Gln Leu Arg Tyr Glu Glu Met Gln Lys Ile
 115 120 125
 Lys Ser Gln Leu Lys Glu Gln Asp Gln Lys Trp Gln Asp Asp Leu Ala
 130 135 140
 Lys Trp Lys Asp Arg Arg Lys Ser Tyr Thr Ser Asp Leu Gln Lys
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<210> 3599
 <211> 691
 <212> DNA
 <213> Homo sapiens

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691

<210> 3600

<211> 98

<212> PRT

<213> Homo sapiens

<400> 3600

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		20						25					30		
Met	Val	Glu	Val	Arg	Ser	Trp	Ser	Gly	Ser	Leu	Val	Gly	Trp	Leu	Ala
	35					40					45				
Pro	Arg	Pro	Leu	Ser	Val	Pro	Ile	Glu	His	Leu	Leu	Gly	Ala	Lys	Asn
	50				55					60					
Cys	Cys	Arg	His	Gly	Gly	Gln	Trp	Val	Arg	Arg	Ala	Val	Pro	Ala	Val
65				70					75					80	
Leu	Ser	Leu	Val	Gly	Ala	Ser	Ser	Leu	His	His	Ala	Val	Tyr	Leu	Phe
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Leu Leu

<210> 3601

<211> 2963

<212> DNA

<213> Homo sapiens

<400> 3601

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<210> 3602

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3602

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			20					25					30		
Glu	Ala	Arg	Glu	Leu	Met	Tyr	Ser	Gly	Ala	Leu	Leu	Phe	Ser	His	
			35					40				45			
Gly	Gln	Gln	Asn	Ser	Ala	Ala	Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser
			50			55					60				
Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu
					70				75					80	
Ala	Lys	Val	Phe	Ser	Leu	Met	Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr
				85				90						95	
Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
			100					105					110		
Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu
			115				120					125			
Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly
			130			135					140				
Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe
					150				155					160	
Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu
				165				170						175	
Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
			180				185						190		
Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	Leu

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 Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Gly Lys Leu
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 Thr Val Phe Thr Val Leu Cys Glu Gln Tyr Gln Pro Ser Leu Arg Arg
 225 230 235 240
 Asp Pro Met Tyr Asn Glu Tyr Leu Asp Arg Ile Gly Gln Leu Phe Phe
 245 250 255
 Gly Val Pro Pro Lys Gln Thr Ser Ser Tyr Gly Gly Leu Leu Gly Asn
 260 265 270
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 290 295

<210> 3603
 <211> 1082
 <212> DNA
 <213> Homo sapiens

<400> 3603
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1080

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1082

<210> 3604

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3604

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			20					25					30		
Val	Ala	Ala	Gln	Glu	Glu	Pro	Asp	Lys	Glu	Gly	Lys	Glu	Lys	Pro	His
		35				40					45				
Ala	Gly	Val	Ser	Pro	Arg	Gly	Val	Lys	Arg	Gln	Arg	Arg	Ser	Ser	Ser
	50					55					60				
Gly	Gly	Ser	Gln	Glu	Lys	Arg	Gly	Arg	Pro	Ser	Gln	Glu	Pro	Pro	Leu
65					70					75					80
Ala	Pro	Pro	His	Arg	Arg	Arg	Arg	Ser	Arg	Gln	His	Pro	Gly	Pro	Leu
			85						90					95	
Pro	Pro	Thr	Asn	Ala	Ala	Pro	Thr	Val	Pro	Gly	Pro	Val	Glu	Pro	Leu
			100					105					110		
Leu	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Ser	Leu	Ala	Pro	Ala	Gly	Pro	Ala
		115					120					125			
Val	Ala	Ala	Pro	Leu	Pro	Ala	Pro	Ser	Thr	Arg	Pro	Ser	Ser	Pro	Ser
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145															

<210> 3605

<211> 2004

<212> DNA

<213> Homo sapiens

<400> 3605

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480

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<210> 3606

<211> 324
 <212> PRT
 <213> Homo sapiens

<400> 3606

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 20           25           30
Lys Gly Asp Tyr Tyr Glu Ala His Gln Met Tyr Arg Thr Leu Phe Phe
 35           40           45
Arg Tyr Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr
 50           55           60
Ser Gly Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala
 65           70           75           80
Asp Leu Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu
 85           90           95
Val Ala Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met
 100          105          110
Asp Pro Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys
 115          120          125
Trp Ser Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln
 130          135          140
Leu Leu Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg
 145          150          155          160
Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu
 165          170          175
Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe
 180          185          190
Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser
 195          200          205
Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu
 210          215          220
Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu
 225          230          235          240
Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys
 245          250          255
Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr
 260          265          270
Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr
 275          280          285
Ser Ser Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly
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 305          310          315          320
Ile Glu Leu Asp

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<210> 3607
 <211> 1726
 <212> DNA
 <213> Homo sapiens

<400> 3607

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<210> 3608
 <211> 436
 <212> PRT
 <213> Homo sapiens

<400> 3608

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Phe	Val	Gln	Phe	Asn	Asp	Gln	Phe	Phe	Trp	Gly	Gln	Leu	Glu	Ala	Val
		20						25					30		
Glu	Val	Lys	Trp	Ser	Val	Arg	Met	Thr	Leu	Cys	Ala	Gly	Ile	Cys	Ser
	35						40					45			
Tyr	Glu	Gly	Lys	Gly	Gly	Met	Cys	Ser	Ile	Arg	Leu	Ser	Glu	Pro	Leu
	50					55					60				
Leu	Lys	Leu	Arg	Pro	Arg	Lys	Asp	Leu	Val	Glu	Thr	Leu	Leu	His	Glu
65					70					75				80	
Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
			85						90					95	
Gly	His	Gly	Pro	Glu	Phe	Cys	Lys	His	Met	His	Arg	Ile	Asn	Ser	Leu
			100						105					110	
Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
		115						120					125		
Glu	Tyr	Arg	Arg	His	Trp	Trp	Arg	Cys	Asn	Gly	Pro	Cys	Gln	His	Arg
	130					135					140				
Pro	Pro	Tyr	Tyr	Gly	Tyr	Val	Lys	Arg	Ala	Thr	Asn	Arg	Glu	Pro	Ser
145					150					155				160	
Ala	His	Asp	Tyr	Trp	Trp	Ala	Glu	His	Gln	Lys	Thr	Cys	Gly	Gly	Thr
			165						170					175	
Tyr	Ile	Lys	Ile	Lys	Glu	Pro	Glu	Asn	Tyr	Ser	Lys	Lys	Gly	Lys	Gly
			180					185					190		
Lys	Ala	Lys	Leu	Gly	Lys	Glu	Pro	Val	Leu	Ala	Ala	Glu	Asn	Lys	Asp
		195					200					205			
Lys	Pro	Asn	Arg	Gly	Glu	Ala	Gln	Leu	Val	Ile	Pro	Phe	Ser	Gly	Lys
	210					215					220				
Gly	Tyr	Val	Leu	Gly	Glu	Thr	Ser	Asn	Leu	Pro	Ser	Pro	Gly	Lys	Leu
225					230					235				240	
Ile	Thr	Ser	His	Ala	Ile	Asn	Lys	Thr	Gln	Asp	Leu	Leu	Asn	Gln	Asn
			245						250					255	
His	Ser	Ala	Asn	Ala	Val	Arg	Pro	Asn	Ser	Lys	Ile	Lys	Val	Lys	Phe
			260					265					270		
Glu	Gln	Asn	Gly	Ser	Ser	Lys	Asn	Ser	His	Leu	Val	Ser	Pro	Ala	Val
		275					280					285			
Ser	Asn	Ser	His	Gln	Asn	Val	Leu	Ser	Asn	Tyr	Phe	Pro	Arg	Val	Ser
	290					295					300				
Phe	Ala	Asn	Gln	Lys	Ala	Phe	Arg	Gly	Val	Asn	Gly	Ser	Pro	Arg	Ile
305					310					315				320	
Ser	Val	Thr	Val	Gly	Asn	Ile	Pro	Lys	Asn	Ser	Val	Ser	Ser	Ser	Ser
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<210> 3609
<211> 1286
<212> DNA
<213> Homo sapiens
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<400> 3609

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120	tgcgtcaacc	agtgggagca	gctgaggggg	ccgggtggca	acgaggatgg
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240	gaagctccca	gggactat	ttt	cctcaagttt	gcctatattg
300	gcagacaagt	tcttgcagct	gntttggaac	caaaggtgtc	aagaggggtgc
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420	gccctggacc	gaggcaccta	ctactgggag	gtggagatta	tcgagggctg
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540	aacgcccact	cctgctgect	gcagtggaat	ggacgcagct	tctccgtctg
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660	gaccgtgect	tggccttcta	tgctgtacgg	gacggcaaga	tgagcctcct
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780	cgcttgga	gtcactttgc	ggggtctctt	acccacagac	tcaagcctgc
840	gagagtgtgg	acgcccactt	gcagatcggg	ccctcaaga	agtccctgcat
900	aagaggaggt	gatgccgggc	acgggcgctc	ctgctgccgt	ctctgctcca
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1020					caccacgctt

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<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

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		20					25					30			
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro
	35						40				45				
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp
50					55					60					
Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu
65				70					75					80	
Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr
			85					90					95		
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr
		100					105					110			
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met
	115						120					125			
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly
	130					135				140					
Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser
145					150					155					160
Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro
			165					170					175		
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr
		180					185					190			
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser
	195					200						205			
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln
	210				215						220				
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys
225					230					235				240	
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro
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<210> 3611

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3611

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120
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180
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240
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300
cagttctatc tggacagaaa gcagagtaag tccaaaatcc atgcagcacg cagcctgagt
360
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660
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<210> 3612

<211> 272

<212> PRT

<213> Homo sapiens

<400> 3612

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Trp	Leu	Gly	Leu	Ser	Tyr	Lys	Gly	Ile	Phe	Gln	Tyr	Asp	Tyr	His	Asp
			20					25					30		
Lys	Val	Lys	Pro	Arg	Lys	Ile	Phe	Gln	Trp	Arg	Gln	Leu	Glu	Asn	Leu
		35				40					45				
Tyr	Phe	Arg	Glu	Lys	Lys	Phe	Ser	Val	Glu	Val	His	Asp	Pro	Arg	Arg
	50				55						60				
Ala	Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His
65					70				75					80	
Thr	Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala
			85					90					95		
Ile	Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys
			100					105					110		
Ile	His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu

115	120	125
Thr Gly Thr Leu Lys Thr Ser Lys Leu Ala Asn Met Gly Ser Lys Gly		
130	135	140
Lys Ile Ile Ser Gly Ser Ser Gly Ser Leu Leu Ser Ser Gly Ser Gln		
145	150	155
Glu Ser Asp Ser Ser Gln Ser Ala Lys Lys Asp Met Leu Ala Ala Leu		
165	170	175
Lys Ser Arg Gln Glu Ala Leu Glu Glu Thr Leu Arg Gln Arg Leu Glu		
180	185	190
Glu Leu Lys Lys Leu Cys Leu Arg Glu Ala Glu Leu Thr Gly Lys Leu		
195	200	205
Pro Val Glu Tyr Pro Leu Asp Pro Gly Glu Glu Pro Pro Ile Val Arg		
210	215	220
Arg Arg Ile Gly Thr Ala Phe Lys Leu Asp Glu Gln Lys Ile Leu Pro		
225	230	235
Lys Gly Glu Glu Ala Glu Leu Glu Arg Leu Glu Arg Glu Phe Ala Ile		
245	250	255
Gln Ser Gln Ile Thr Glu Ala Ala Arg Arg Leu Ala Ser Asp Pro Asn		
260	265	270

<210> 3613
 <211> 659
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 480
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<210> 3614
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 3614

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 Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
 35 40 45
 Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
 50 55 60
 Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
 65 70 75 80
 Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
 85 90 95
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<210> 3615

<211> 1388

<212> DNA

<213> Homo sapiens

<400> 3615

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 180
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 240
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 1380
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 1388

<210> 3616

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3616

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			20				25					30		
Glu	Arg	Ser	Gly	Ser	Gln	Thr	Glu	Ser	Glu	Glu	Glu	Ser	Ser	Glu
			35				40					45		Met
Asp	Asp	Glu	Asp	Tyr	Glu	Arg	Arg	Arg	Ser	Glu	Cys	Val	Ser	Glu
			50				55				60			Met
Leu	Asp	Leu	Glu	Lys	Gln	Phe	Ser	Glu	Leu	Lys	Glu	Lys	Leu	Phe
					70					75				80
Glu	Arg	Leu	Ser	Gln	Leu	Arg	Leu	Arg	Leu	Glu	Glu	Val	Gly	Ala
				85						90				95
Arg	Ala	Pro	Glu	Tyr	Thr	Glu	Pro	Leu	Gly	Gly	Leu	Gln	Arg	Ser
			100					105				110		Leu
Lys	Ile	Arg	Ile	Gln	Val	Ala	Gly	Ile	Tyr	Lys	Gly	Phe	Cys	Leu
			115				120					125		Asp
Val	Ile	Arg	Asn	Lys	Tyr	Glu	Cys	Glu	Leu	Gln	Gly	Ala	Lys	Gln
			130			135					140			His
Leu	Glu	Ser	Glu	Lys	Leu	Leu	Leu	Tyr	Asp	Thr	Leu	Gln	Gly	Glu
					150					155				160
Gln	Glu	Arg	Ile	Gln	Arg	Leu	Glu	Glu	Asp	Arg	Gln	Ser	Leu	Asp
				165						170				175
Ser	Ser	Glu	Trp	Trp	Asp	Asp	Lys	Leu	His	Ala	Arg	Gly	Ser	Ser
			180				185					190		Arg
Ser	Trp	Asp	Ser	Leu	Pro	Pro	Ser	Lys	Arg	Lys	Lys	Ala	Pro	Leu
			195				200					205		Val
Ser	Gly	Pro	Tyr	Ile	Val	Tyr	Met	Leu	Gln	Glu	Ile	Gly	Ile	Leu
			210			215					220			Glu
Asp	Trp	Thr	Ala	Ile	Lys	Lys	Ala	Arg	Ala	Ala	Val	Ser	Pro	Gln
														Lys

225 230 235 240
 Arg Lys Ser Asp Asp Arg Arg Thr His Arg Pro Leu Arg Val Cys Pro
 245 250 255
 Ala Arg Leu Leu Trp Cys Cys Trp Ala Leu Pro Leu His Leu Ala Leu
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 Ala Trp Thr Pro Pro Leu Pro Ser Ser Arg Pro Ala Gln Leu Trp Pro
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<210> 3617

<211> 804

<212> DNA

<213> Homo sapiens

<400> 3617

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 120
 aggatgggat ggtagtagtg aaggacatag gatgggggta gagtgtggag actttttgaa
 180
 atagtataga tgaatgccct gaggggactg tgaacaagct ctgccctct taggaaatca
 240
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 300
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 360
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 420
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<210> 3618

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3618

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<210> 3619
<211> 948
<212> DNA
<213> Homo sapiens
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2775

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948

<210> 3620

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3620

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		20						25					30		
Ser	Ser	Ser	Ser	Met	Ala	Thr	Pro	Leu	Ser	Cys	Cys	Pro	Thr	Trp	Ala
		35					40					45			
Pro	Gly	Ala	Ser	Ser	Gln	Pro	Cys	Ser	Thr	Tyr	Pro	Pro	Trp	Arg	Thr
	50					55					60				
Thr	Thr	Leu	Ser	Thr	Ser	Thr	Ser	Trp	Ser	Cys	Leu	Leu	Leu	Pro	Cys
65					70					75				80	
Ala	Ser	Cys	Pro	Ser	Arg	Cys	Ser	Cys	Gln	Thr	Trp	Pro	Ser	Ser	Pro
				85					90					95	
Thr	Ala	Ser	Thr	Pro	Thr	Thr	Ser	Cys	Thr	Ser	Phe	Met	Thr	Thr	Cys
			100					105					110		
Cys	His	Ser	Ser	Thr	Pro	Cys	Gly	Ser	Phe	Pro	Ala	Trp	Pro	Thr	Arg
		115					120					125			
His	Gly	Ser	Ser	Ser	Trp	Arg	Ala	Gly	Ala	Arg	Val	His	Thr	Ser	Thr
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Ser	Thr	Ser	Cys	Ser	Ala	Pro	Ser	Ser	Leu	Ser	Cys	Gly	His	Ser	
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<210> 3621

<211> 2934

<212> DNA

<213> Homo sapiens

<400> 3621

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180
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240
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540

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660
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1500
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<210> 3622

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3622

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Glu	Ser	Gly	Phe	Asp	Pro	Asn	Ile	Arg	Asp	Ser	Arg	Gly	Arg	Thr	Gly
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His	Lys	Phe	Gly	Ala	Asp	Leu	Leu	Ala	Thr	Asp	Tyr	Gln	Gly	Asn	Thr
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Ala	Leu	His	Leu	Cys	Gly	His	Val	Asp	Thr	Ile	Gln	Phe	Leu	Val	Ser
		85						90					95		
Asn	Gly	Leu	Lys	Ile	Asp	Ile	Cys	Asn	His	Gln	Gly	Ala	Thr	Pro	Leu
	100						105					110			
Val	Leu	Ala	Lys	Arg	Arg	Gly	Val	Asn	Lys	Asp	Val	Ile	Arg	Leu	Leu
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Glu	Ser	Leu	Glu	Glu	Gln	Glu	Val	Lys	Gly	Phe	Asn	Arg	Gly	Thr	His
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Ser	Lys	Leu	Glu	Thr	Met	Gln	Thr	Ala	Glu	Ser	Glu	Ser	Ala	Met	Glu
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Ser	His	Ser	Leu	Leu	Asn	Pro	Asn	Leu	Gln	Gln	Gly	Glu	Gly	Val	Leu

165 170 175
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 Trp Arg Val Leu Leu Leu Ile Phe Val Ile Ala Leu Leu Ser Leu Gly
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 Glu Leu Val His
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<210> 3623
 <211> 586
 <212> DNA
 <213> Homo sapiens

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<210> 3624
 <211> 159
 <212> PRT
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<400> 3624
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 35 40 45
 Glu Lys Lys Arg Met Asp Lys Ala Ile Gly Tyr Ser Phe Ala Ile Val
 50 55 60
 Gly Ile Asn Ile Thr Asp Leu Ala Tyr Asn Leu Leu Val Ser Gly Ala
 65 70 75 80
 Leu Lys Thr His Phe Tyr Asn Ile Ala Pro Glu Ala Pro Thr Leu Ser

	85		90		95										
His	Phe	Gln	Gln	Thr	Phe	Cys	Tyr	Leu	Met	His	Glu	Phe	His	Lys	Phe
		100						105					110		
Trp	Ile	Glu	Glu	Asp	Pro	Met	Asp	Ile	Met	Glu	Phe	Asn	Arg	Val	Arg
		115					120					125			
Glu	Lys	Phe	Arg	Lys	Arg	Ile	Ile	Lys	Gln	Leu	Gln	Asn	Pro	Asp	Met
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<211> 4799

<212> DNA

<213> Homo sapiens

<400> 3625

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120

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180

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240

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360

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420

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480

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540

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600

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660

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720

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900

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<210> 3626

<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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		20					25						30		
Trp	Gly	Pro	Ser	Ser	Ser	Leu	Met	Ser	Glu	Ile	Ala	Asp	Leu	Thr	Tyr
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Asn	Val	Val	Ala	Phe	Ser	Glu	Ile	Met	Ser	Met	Ile	Trp	Lys	Arg	Leu
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Asn	Asp	His	Gly	Lys	Asn	Trp	Arg	His	Val	Tyr	Lys	Ala	Met	Thr	Leu
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Met	Glu	Tyr	Leu	Ile	Lys	Thr	Gly	Ser	Glu	Arg	Val	Ser	Gln	Gln	Cys
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Lys	Glu	Asn	Met	Tyr	Ala	Val	Gln	Thr	Leu	Lys	Asp	Phe	Gln	Tyr	Val
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Asp	Arg	Asp	Gly	Lys	Asp	Gln	Gly	Val	Asn	Val	Arg	Glu	Lys	Ala	Lys
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Gln	Leu	Val	Ala	Leu	Leu	Arg	Asp	Glu	Asp	Arg	Leu	Arg	Glu	Glu	Arg
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Ala	His	Ala	Leu	Lys	Thr	Lys	Glu	Lys	Leu	Ala	Gln	Thr	Ala	Thr	Ala
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Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly	Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala
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Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu	Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu
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Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp	Gln	Glu	Glu	Arg	Ile	Arg	Arg	Gly
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Asp	Asp	Leu	Arg	Leu	Gln	Met	Ala	Ile	Glu	Glu	Ser	Lys	Arg	Glu	Thr
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Gly	Gly	Lys	Glu	Glu	Ser	Ser	Leu	Met	Asp	Leu	Ala	Asp	Val	Phe	Thr
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Ala	Pro	Ala	Pro	Ala	Pro	Thr	Thr	Asp	Pro	Trp	Gly	Gly	Pro	Ala	Pro
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Met	Ala	Ala	Ala	Val	Pro	Thr	Ala	Ala	Pro	Thr	Ser	Asp	Pro	Trp	Gly

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 Ser Val Asp Pro Trp Gly Gly Thr Pro Ala Pro Ala Ala Gly Glu Gly
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 Pro Thr Pro Asp Pro Trp Gly Ser Ser Asp Gly Gly Val Pro Val Ser
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 Pro Trp Gly Ser Pro Ala Lys Pro Ser Thr Asn Gly Thr Thr Thr
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 Ala Gly Gly Phe Asp Thr Glu Pro Asp Glu Phe Ser Asp Phe Asp Arg
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 Leu Leu Ala Gly Glu Val Pro Ala Arg Ser Pro Gly Ala Phe Asp Met
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 Ala Ala Thr Pro Thr Pro Thr Pro Thr Arg Lys Thr Pro Glu Ser
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 Arg Pro Gly Pro Thr Pro Pro Gly Ala Lys Ala Ser Asn Pro Phe Leu
 465 470 475 480
 Pro Gly Gly Gly Pro Ala Thr Gly Pro Ser Val Thr Asn Pro Phe Gln
 485 490 495
 Pro Ala Pro Pro Ala Thr Leu Thr Leu Asn Gln Leu Arg Leu Ser Pro
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 Val Pro Pro Val Pro Gly Ala Pro Pro Thr Tyr Ile Ser Pro Leu Gly
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<210> 3627

<211> 1760

<212> DNA

<213> Homo sapiens

<400> 3627

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<210> 3628

<211> 440

<212> PRT

<213> Homo sapiens

<400> 3628

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 35 40 45
 Thr Ser Leu Pro Thr Ser His Thr Tyr Leu Gly Ala Asp Met Glu Glu
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 Phe His Gly Arg Thr Leu His Asp Asp Asp Ser Cys Gln Val Ile Pro
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 Val Leu Pro Gln Val Met Met Ile Leu Ile Pro Gly Gln Thr Leu Pro
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 Leu Gln Leu Phe His Pro Gln Glu Val Ser Met Val Arg Asn Leu Ile
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 Gln Ala Lys Val Gln Ile Leu Pro Glu Cys Val Leu Pro Ser Thr Met
 180 185 190
 Ser Ala Val Gln Leu Glu Ser Leu Asn Lys Cys Gln Ile Phe Pro Ser
 195 200 205
 Lys Pro Val Ser Arg Glu Asp Gln Cys Ser Tyr Lys Trp Trp Gln Lys
 210 215 220
 Tyr Gln Lys Arg Lys Phe His Cys Ala Asn Leu Thr Ser Trp Pro Arg
 225 230 235 240
 Trp Leu Tyr Ser Leu Tyr Asp Ala Glu Thr Leu Met Asp Arg Ile Lys
 245 250 255
 Lys Gln Leu Arg Glu Trp Asp Glu Asn Leu Lys Asp Asp Ser Leu Pro
 260 265 270
 Ser Asn Pro Ile Asp Phe Ser Tyr Arg Val Ala Ala Cys Leu Pro Ile
 275 280 285
 Asp Asp Val Leu Arg Ile Gln Leu Leu Lys Ile Gly Ser Ala Ile Gln
 290 295 300
 Arg Leu Arg Cys Glu Leu Asp Ile Met Asn Lys Cys Thr Ser Leu Cys
 305 310 315 320
 Cys Lys Gln Cys Gln Glu Thr Glu Ile Thr Thr Lys Asn Glu Ile Phe
 325 330 335
 Ser Leu Ser Leu Cys Gly Pro Met Ala Ala Tyr Val Asn Pro His Gly
 340 345 350
 Tyr Val His Glu Thr Leu Thr Val Tyr Lys Ala Cys Asn Leu Asn Leu
 355 360 365
 Ile Gly Arg Pro Ser Thr Glu His Ser Trp Phe Pro Gly Tyr Ala Trp
 370 375 380
 Thr Val Ala Gln Cys Lys Ile Cys Ala Ser His Ile Gly Trp Lys Phe
 385 390 395 400
 Thr Ala Thr Lys Lys Asp Met Ser Pro Gln Lys Phe Trp Gly Leu Thr

405 410 415
 Arg Ser Ala Leu Leu Pro Thr Ile Pro Asp Thr Glu Asp Glu Ile Ser
 420 425 430
 Pro Asp Lys Val Ile Leu Cys Leu
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<210> 3629
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 3629
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 180
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 240
 gcaactgctgc cgcagttggc agcaaacgca gtgctgttcc tgtgcgggaa cgtggcagga
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 360
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 420
 gaaggtcaga gcagcgtcc gagggaggag ttgcttagat tacataacgg ggctcctcca
 480
 caagttgagt gactctgggc aggtttcttg acctgtttct tcttttgtat aaaatgtggg
 540
 tattgcccac cttagaaggt tgtgaggctc aaacaaacca aagcttataa aaagcacttt
 600
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 660
 aaaggtgatc agtgtaggat ggagtgtg ggccc
 695

<210> 3630
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 3630
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 His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val
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 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
 35 40 45
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His
 50 55 60
 Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro
 65 70 75 80
 Ala Leu Leu Pro Gln Leu Ala Ala Asn Ala Val Leu Phe Leu Cys Gly

			85					90				95	
Asn	Val	Ala	Gly	Val	Tyr	His	Lys	Ala	Leu	Met	Glu	Arg	Ala
			100					105					110
Ala	Thr	Phe	Arg	Glu	Ala	Leu	Ser	Ser	Leu	His	Ser	Arg	Arg
			115					120				125	
Asp	Thr	Glu	Lys	Lys	His	Gln	Val	Ser	Arg	Ala			
			130					135					

<210> 3631
 <211> 864
 <212> DNA
 <213> Homo sapiens

<400> 3631
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 120
 gctgcaaagg aatcagtcct ggctggatca tgtctgcatt tcccagatgt gctatttccc
 180
 ggggattggg cctggtacat gcagtatctg gagaagcgca agaattcctgt gtgccacttt
 240
 gtgacacccc tggacggctc tgtggacgta gacgagcacc gccggccgga ggccatcacc
 300
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 360
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 420
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 480
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 660
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 720
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 840
 cccaccgccc catcctggc gcgc
 864

<210> 3632
 <211> 222
 <212> PRT
 <213> Homo sapiens

<400> 3632
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<210> 3633
<211> 1570
<212> DNA
<213> Homo sapiens
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120
aggagagcct gggcaagcat tcttaggttg atgctggggc ccagagtagc agtgagcatc
180
ctgtgtgaag atggcatttc tctactgatta ttggaaaagc acaagagcca cgtgctggag
240
ccattgtcca gccttgccct ggaggagcag tgtctggcct tgtccctaga ttggtccact
300
ggaaaaactg gaagggcccg ggaccagccc ttgaagatca tcagcagtga ctccacaggg
360
cagctccacc tcctgatggg gaatgagacg aggccaggc tgcagaaagt ggcctcatgg
420
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480
tattcagggg gcgacgatgg ctttctgagg ggctgggaca ccagggtacc cggcaaattt
540
ctcttcacca gcnaaaagac acaccatnng ggtgtgtgca gcatccagag cagccctcat
600
cgggagcaca tcctggccac gggaagctat gatgaacaca tcctactgtg ggacacacga
660

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aacatgaagc agccgttggc agatacgccct gtgcaggggtg gggatatggag aatcaagtgg
 720
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 780
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 840
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 900
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 960
 agcgagttgc caacaccctg tcatgaatgc agagaggata acgatgggga gggccatgcc
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 1080
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 1260
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 1320
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 1380
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 1440
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 1570

<210> 3634

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3634

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		20					25						30		
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
		35				40						45			
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
	50				55					60					
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65				70				75						80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85				90					95			
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
		100					105					110			
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

	115		120		125										
His	Ser	Gly	Phe	Lys	Ile	Leu	Asn	Cys	Gln	Lys	Ala	Met	Glu	Glu	Arg
	130					135					140				
Gln	Glu	Ala	Thr	Val	Leu	Thr	Ser	His	Thr	Leu	Pro	Asp	Ser	Leu	Val
145					150					155				160	
Tyr	Gly	Ala	Asp	Trp	Ser	Trp	Leu	Leu	Phe	Arg	Ser	Leu	Gln	Arg	Ala
			165						170				175		
Pro	Ser	Trp	Ser	Phe	Pro	Ser	Asn	Leu	Gly	Thr	Lys	Thr	Ala	Asp	Leu
			180					185					190		
Lys	Gly	Ala	Ser	Glu	Leu	Pro	Thr	Pro	Cys	His	Glu	Cys	Arg	Glu	Asp
	195					200					205				
Asn	Asp	Gly	Glu	Gly	His	Ala	Arg	Pro	Gln	Ser	Gly	Met	Lys	Pro	Leu
210					215						220				
Thr	Glu	Gly	Met	Arg	Lys	Asn	Gly	Thr	Trp	Leu	Gln	Ala	Thr	Ala	Ala
225					230					235				240	
Thr	Thr	Arg	Asp	Cys	Gly	Val	Asn	Pro	Glu	Glu	Ala	Asp	Ser	Ala	Phe
			245						250				255		
Ser	Leu	Leu	Ala	Thr	Cys	Ser	Phe	Tyr	Asp	His	Ala	Leu	His	Leu	Trp
			260					265					270		
Glu	Trp	Glu	Gly	Asn											
	275														

<210> 3635

<211> 835

<212> DNA

<213> Homo sapiens

<400> 3635

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 180
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 240
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 300
 ttggcagggc tggggcaagg aattctgaca gaaacacaac aagggttaat ggtagccagc
 360
 cctgctcaga ccctcaatga cacgctggat gacatcatgg cagcagtcag tggaagagca
 420
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 480
 ccaactccaa gtcctatcat ctctccttca gccatgcttc ctatctaccc tgccattgat
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 600
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 660
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 720
 ttgctggaca atggtgcaga cattgaagcc cagtctgaaa gaaccaagga cacaccactc
 780

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835

<210> 3636

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3636

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20 25 30
Ala Arg Leu Gln Gln Val Asp Pro Val Leu Leu Lys Asp Glu Pro Gln
35 40 45
Gln Thr Ala Ala Gln Met Gly Cys Ala Pro Ile Gln Pro Leu Ala Met
50 55 60
Pro Gln Ala Leu Pro Leu Ala Ala Gly Pro Leu Pro Pro Gly Ser Ile
65 70 75 80
Ala Asn Leu Thr Glu Leu Gln Gly Val Ile Val Gly Gln Pro Val Leu
85 90 95
Gly Gln Ala Gln Leu Ala Gly Leu Gly Gln Gly Ile Leu Thr Glu Thr
100 105 110
Gln Gln Gly Leu Met Val Ala Ser Pro Ala Gln Thr Leu Asn Asp Thr
115 120 125
Leu Asp Asp Ile Met Ala Ala Val Ser Gly Arg Ala Ser Ala Met Ser
130 135 140
Asn Thr Pro Thr His Ser Ile Ala Ala Ser Ile Ser Gln Pro Gln Thr
145 150 155 160
Pro Thr Pro Ser Pro Ile Ile Ser Pro Ser Ala Met Leu Pro Ile Tyr
165 170 175
Pro Ala Ile Asp Ile Asp Ala Gln Thr Glu Ser Asn His Asp Thr Ala
180 185 190
Leu Thr Leu Ala Cys Ala Gly Gly His Glu Glu Leu Val Gln Thr Leu
195 200 205
Leu Glu Arg Gly Ala Ser Ile Glu His Arg Asp Lys Lys Gly Phe Thr
210 215 220
Pro Leu Ile Leu Ala Ala Thr Ala Gly His Val Gly Val Val Glu Ile
225 230 235 240
Leu Leu Asp Asn Gly Ala Asp Ile Glu Ala Gln Ser Glu Arg Thr Lys
245 250 255
Asp Thr Pro Leu Ser Leu Ala Cys Ser Gly Gly Arg Gln Glu Val Val
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Glu Leu Leu Leu Ala Arg
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<210> 3637

<211> 2128

<212> DNA

<213> Homo sapiens

<400> 3637

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120
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180
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240
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300
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1560
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1620
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1680

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 1920
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 1980
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<210> 3638

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3638

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		20						25					30		
Leu	Trp	Gly	Ser	Gln	Leu	Gly	Lys	Pro	Val	Ser	Phe	Gly	Thr	Phe	Arg
		35					40					45			
Arg	Cys	Ser	Tyr	Pro	Val	His	Asp	Glu	Ser	Arg	Gln	Met	Met	Val	Met
	50					55					60				
Val	Glu	Glu	Cys	Gly	Arg	Tyr	Ala	Ser	Phe	Gln	Gly	Ile	Pro	Ser	Ala
65					70					75				80	
Glu	Trp	Arg	Ile	Cys	Thr	Ile	Val	Thr	Gly	Leu	Gly	Cys	Gly	Leu	Leu
			85						90					95	
Leu	Leu	Val	Ala	Leu	Thr	Ala	Leu	Met	Gly	Cys	Cys	Val	Ser	Asp	Leu
		100						105					110		
Ile	Ser	Arg	Thr	Val	Gly	Arg	Val	Ala	Gly	Gly	Ile	Gln	Phe	Leu	Gly
		115					120					125			
Gly	Leu	Leu	Ile	Gly	Ala	Gly	Cys	Ala	Leu	Tyr	Pro	Leu	Gly	Trp	Asp
	130					135					140				
Ser	Glu	Glu	Val	Arg	Gln	Thr	Cys	Gly	Tyr	Thr	Ser	Gly	Gln	Phe	Asp
145					150					155				160	
Leu	Gly	Lys	Cys	Glu	Ile	Gly	Trp	Ala	Tyr	Tyr	Cys	Thr	Gly	Ala	Gly
			165						170					175	
Ala	Thr	Ala	Ala	Met	Leu	Leu	Cys	Thr	Trp	Leu	Ala	Cys	Phe	Ser	Gly
			180					185					190		
Lys	Lys	Gln	Lys	His	Tyr	Pro	Tyr								
		195					200								

<210> 3639

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3639

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 120
 aagactaaca gtggttatct ctccagcgga ttataaatgt tttgggtttt tttttttttt
 180
 tgtacatttt agtatttttt gaaatttttt taataagcgt gtattacata cagtaaacia
 240
 aagcacatta atgtaggcag attatcaatg ttatgcattt cactgattgc atatctcttt
 300
 ttttatcaat ggtgaacatt gcaaatgatt gatacgtttt tcttaggaag tggcattgcc
 360
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 420
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 480
 tccagggcat ttctttcatt atgagtgaca tttttctgaa aggaacgtga tctcgttttc
 540
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 600
 tgtgccttct cctgtctctt tctaggtcct gattctcacc tctgctgtg taataaccct
 660
 gtcatttctc ccttatccca gttccatgtc tgtgacaagc ttggaggccg agttgcaagc
 720
 taagat
 726

<210> 3640

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3640

Met	Leu	His	Ala	Ala	Arg	Lys	Arg	Asp	His	Val	Pro	Phe	Arg	Lys	Met
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Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
	50					55				60					
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65					70				75					80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
			85					90						95	
Leu	Ile	Ile	Cys	Leu	His										
				100											

<210> 3641

<211> 455

<212> DNA

<213> Homo sapiens

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 120
 agtcccggag cagtcacgcg agccgggacc ttgccccgct ggaacgcaga agcgggcgtg
 180
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 240
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<210> 3642
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 3642
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 Pro Arg Gly Arg Ala Gly Gly Ala Ala Pro Gly Gly Glu Glu Met Ser
 20 25 30
 Gln Ser Pro Glu Glu Ser Arg Ser Ser His Ala Ser Arg Asp Leu Ala
 35 40 45
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu
 50 55 60
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser
 65 70 75 80
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala
 85 90 95
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro
 100 105 110
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser
 115 120 125
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala
 130 135 140
 Phe Lys Thr Arg
 145

<210> 3643
 <211> 2243
 <212> DNA
 <213> Homo sapiens

<400> 3643
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ctttgcaagc aggtggccag taaagctgag gagaatctgc tcatgggtgct ggggacagac
180
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360
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420
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480
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780
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 2243

<210> 3644

<211> 560

<212> PRT.

<213> Homo sapiens

<400> 3644

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Gln	Val	Ala	Ser	Lys	Ala	Glu	Glu	Asn	Leu	Leu	Met	Val	Leu	Gly
			20					25					30	
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu
			35				40					45		
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro
			50			55					60			
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys
			65			70				75				80
Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys
				85					90					95
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn
			100					105					110	
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu
			115					120				125		
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu
			130			135					140			
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly
			145			150				155				160
Ser	Met	Ala	Ser	Glu	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu
				165					170				175	
Lys	Leu	Leu	Asn	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu
			180					185					190	
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val
			195				200					205		
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser

210	215	220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala		
225	230	235
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala		240
	245	250
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu		255
	260	265
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val		270
	275	280
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe		285
	290	295
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu		300
305	310	315
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu		320
	325	330
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile		335
	340	345
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu		350
	355	360
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr		365
	370	375
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn		380
385	390	395
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Phe Asn Asp		400
	405	410
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu		415
	420	425
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp		430
	435	440
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys		445
450	455	460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp		465
465	470	475
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp		480
	485	490
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu		495
	500	505
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser		510
	515	520
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu		525
530	535	540
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu		545
545	550	555
		560

<210> 3645

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3645

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120

tcgggttgat ttctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt
 180
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt
 240
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 420
 tgttaatatg aattcggaag taagtcccat ttttcgcact gccgggtact agttctaaac
 480
 cataattagg ctgggccatt tgtacctcca agggagtgg aatggcagggc ttggcaatat
 540
 gcagataatg gtaagaccca ggaagaatgc ccccttgaat cttggctccc ttgtacatgg
 600
 ggatgagccg gtcaagatta gctggtggct cggtcacagg ctcaagggtt ggatcaaaga
 660
 gatgtagcat agctgctgcc agctgaaagc caatttcttt ggaactgaag ttgctggtgg
 720
 gcccatcat ttgagtagta tctattggag aatttggtga gggagccagc agctctgatg
 780
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 823

<210> 3646

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
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Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
		20						25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
	35					40						45			
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70					75				80	
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
			85					90						95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
		100					105						110		
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
	115						120					125			
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130					135					140				
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150					155				160	
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165					170						175	
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

	180		185		190										
Ala	His	Gln	Ile	Glu	Asp	Glu	Glu	Ile	Asn	Pro	Thr	Glu	Lys	Pro	Arg
	195		200		205										
Gln	Tyr	Leu	Lys	Arg	Val	Phe	Glu	Glu	Ser	Ile	Tyr	Lys	Thr	Leu	Val
	210		215		220										
Glu	Arg	Ser	Thr	Leu	Asp	Tyr	Leu	His	Tyr	Asn	Arg	Tyr	His	Leu	Pro
	225		230		235									240	
Met	Tyr	Ala													

<210> 3647
 <211> 584
 <212> DNA
 <213> Homo sapiens

<400> 3647
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 120
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 180
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 240
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 300
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 360
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 420
 gccgtccga cccgcgttc cccgcagacc ccacactggc gcgcggccac aacgtcatca
 480
 atgtcatcgt ccccgagagc cgagccact tcttcagca gctgggctac gtgctggcca
 540
 cgctgctgt cttcactctg ctactggtea ctgtcctcct ggcc
 584

<210> 3648
 <211> 63
 <212> PRT
 <213> Homo sapiens

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Ala	Trp	Leu	Trp	Ala	Arg	Met	Pro
Val	Ser	Ser	Arg	Trp	Arg	Ser	Pro
Cys	Thr	Thr	Ile	Thr	Val	Ala	Cys
	50		55		60		

<210> 3649
 <211> 648

<212> DNA

<213> Homo sapiens

<400> 3649

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120
tgctcattgt ttgtgtgct cccctttttt ttccaggttg ctatttctgc agatgtcaaa
180
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240
aggaatcaga aggctggtgt gtttaagacc cagaaaatat caagctgcgt tttacgatgg
300
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420
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480
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540
tcaaacttcc actccaagtt gaaaaaggaa aaccgggaca tatatgaaga aaaccttcat
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<210> 3650

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3650

Met	Ile	Leu	Lys	Ala	Cys	His	Ser	Cys	Phe	His	Phe	His	Thr	Asp	Lys
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His	Ile	Cys	Ser	Leu	Phe	Ala	Val	Leu	Pro	Phe	Phe	Phe	Gln	Val	Ala
			20					25					30		
Ile	Ser	Ala	Asp	Val	Lys	Glu	Val	Leu	Leu	Thr	Asp	Gly	Asn	Glu	Lys
		35				40						45			
Ala	Ile	Arg	Asn	Val	Gln	Asp	Ile	Ile	Thr	Arg	Asn	Gln	Lys	Ala	Gly
	50				55						60				
Val	Phe	Lys	Thr	Gln	Lys	Ile	Ser	Ser	Cys	Val	Leu	Arg	Trp	Asp	Asn
65				70					75					80	
Glu	Thr	Asp	Val	Ser	Gln	Leu	Glu	Gly	His	Phe	Asp	Ile	Val	Met	Cys
			85					90					95		
Ala	Asp	Cys	Leu	Phe	Leu	Asp	Gln	Tyr	Arg	Ala	Ser	Leu	Val	Asp	Ala
		100						105					110		
Ile	Lys	Arg	Leu	Leu	Gln	Pro	Arg	Gly	Lys	Ala	Met	Val	Phe	Ala	Pro
	115					120						125			
Arg	Arg	Gly	Asn	Thr	Leu	Asn	Gln	Phe	Cys	Asn	Leu	Ala	Glu	Lys	Ala
	130					135					140				
Gly	Phe	Cys	Ile	Gln	Arg	His	Glu	Asn	Tyr	Asp	Glu	His	Ile	Ser	Asn
145				150					155					160	
Phe	His	Ser	Lys	Leu	Lys	Lys	Glu	Asn	Pro	Asp	Ile	Tyr	Glu	Glu	Asn

165 170 175
 Leu His Tyr Pro Pro Leu Leu Ile Leu Thr Lys His Gly
 180 185

<210> 3651
 <211> 2469
 <212> DNA
 <213> Homo sapiens

<400> 3651
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 120
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 180
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 420
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 480
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 660
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 720
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 780
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 840
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 900
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 960
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 1260
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 1320

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 1380
 aaatatatatt ctctattgcc aaagaggctg taccatcctt gaaggcacat ttgtgggttc
 1440
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 1560
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 2040
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 2280
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 2340
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 2460
 aaaaaaaaaa
 2469

<210> 3652

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3652

Met	Ala	Ala	Val	Gln	Met	Asp	Pro	Glu	Leu	Ala	Lys	Arg	Leu	Phe	Phe
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Glu	Gly	Ala	Thr	Val	Val	Ile	Leu	Asn	Met	Pro	Lys	Gly	Thr	Glu	Phe
			20					25					30		
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
		35					40					45			
Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

50		55		60	
Lys Ala Asn Pro Lys Glu Val Gly Pro Arg Met Gly Phe Phe Leu Ser					
65		70		75	80
Leu His Gln Arg Gly Leu Thr Val Leu Arg Trp Ser Thr Leu Arg Glu					
	85		90		95
Glu Val Asp Leu Ser Pro Ala Pro Glu Ser Glu Val Glu Ala Met Arg					
	100		105		110
Ala Asn Leu Gln Glu Leu Asp Gln Phe Leu Gly Pro Tyr Pro Tyr Ala					
	115		120		125
Thr Leu Lys Lys Trp Ile Ser Leu Thr Asn Phe Ile Ser Glu Ala Thr					
	130		135		140
Val Glu Lys Leu Gln Pro Glu Asn Arg Gln Ile Cys Ala Phe Ser Asp					
	145		150		155
Val Leu Pro Val Leu Ser Met Lys His Thr Lys Asp Arg Val Gly Gln					
	165		170		175
Asn Leu Pro Arg Cys Gly Ile Glu Cys Lys Ser Tyr Gln Glu Gly Leu					
	180		185		190
Ala Arg Leu Pro Glu Met Lys Pro Arg Ala Gly Thr Glu Ile Arg Phe					
	195		200		205
Ser Glu Leu Pro Thr Gln Met Phe Pro Glu Gly Ala Thr Pro Ala Glu					
	210		215		220
Ile Thr Lys His Ser Met Asp Leu Ser Tyr Ala Leu Glu Thr Val Leu					
	225		230		235
Ile Lys Gln Phe Pro Ser Ser Pro Gln Asp Val Leu Gly Glu Leu Gln					
	245		250		255
Phe Ala Phe Val Cys Phe Leu Leu Gly Asn Val Tyr Glu Ala Phe Glu					
	260		265		270
His Trp Lys Arg Leu Leu His Leu Leu Cys Arg Ser Glu Ala Ala Met					
	275		280		285
Met Lys His His Thr Leu Tyr Ile Asn Leu Met Ser Ile Leu Tyr His					
	290		295		300
Gln Leu Gly Glu Ile Pro Ala Asp Phe Phe Val Asp Ile Val Ser Gln					
	305		310		315
Asp Asn Phe Leu Thr Ser Thr Leu Gln Val Phe Phe Ser Ser Ala Cys					
	325		330		335
Ser Ile Ala Val Asp Ala Thr Leu Arg Lys Lys Ala Glu Lys Phe Gln					
	340		345		350
Ala His Leu Thr Lys Lys Phe Arg Trp Asp Phe Ala Ala Glu Pro Glu					
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Asp Cys Ala Pro Val Val Val Glu Leu Pro Glu Gly Ile Glu Met Gly					
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<210> 3653

<211> 283

<212> DNA

<213> Homo sapiens

<400> 3653

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180

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<210> 3654
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 3654
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 Ile Pro Ile Arg Ala Ser Phe Ala Ala Ala Glu Met Glu Arg Cys His
 20 25 30
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 35 40 45
 Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg
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 Arg Arg Gly Arg Ile Val Ser Gly Ala Ala Phe Trp Gly Cys Leu Pro
 65 70 75 80
 Val Gly Ile Phe Ser Thr Pro Arg
 85

<210> 3655
 <211> 3477
 <212> DNA
 <213> Homo sapiens

<400> 3655
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 240
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 300
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 360
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 420
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 720

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2340

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 3360
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<210> 3656

<211> 429

<212> PRT

<213> Homo sapiens

<400> 3656

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Cys	Met	Ala	Ser	Leu	Phe	Pro	Ala	Trp	Glu	Pro	Pro	Leu	Ile	Thr	Leu
			20					25					30		
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
		35					40					45			
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50					55					60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

<400> 3657
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 120
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 180
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 240
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<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
		20					25					30			
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35				40						45			
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
	50					55				60					
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
65					70				75					80	
Gln	Arg	Val	His	Val	Gln	Val	Cys	His	Met	Phe	Ile	Phe	Gly	Ser	Arg
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Arg	Thr	Arg													

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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 180
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 240
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 300
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 360
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 420
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 480

gaccactta aggatgaatt aaaccttget gattctgaag tggataacca aaaacgaggg
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 660
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 720
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 780
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 840
 tttattaaat tactgggaga aatcatggag cacagattca agacatatca acaatttaga
 900
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 960
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 1025

<210> 3660

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3660

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 20 25 30
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 35 40 45
 Leu Asn Leu Gln Gln His Leu Ser Ala Leu Glu Lys Asp Ile Lys His
 50 55 60
 Asn Glu Glu Leu Leu Lys Arg Cys Gln Leu His Tyr Lys Glu Leu Lys
 65 70 75 80
 Met Lys Ile Arg Lys Asn Ile Ser Glu Ile Arg Glu Leu Glu Asn Ile
 85 90 95
 Glu Glu His Gln Ser Val Asp Ile Ala Thr Leu Glu Asp Glu Ala Gln
 100 105 110
 Glu Asn Lys Ser Lys Met Lys Met Val Glu Glu His Met Glu Gln Gln
 115 120 125
 Lys Glu Asn Met Glu His Leu Lys Ser Leu Lys Ile Glu Ala Glu Asn
 130 135 140
 Lys Tyr Asp Ala Ile Lys Phe Lys Ile Asn Gln Leu Ser Glu Leu Ala
 145 150 155 160
 Asp Pro Leu Lys Asp Glu Leu Asn Leu Ala Asp Ser Glu Val Asp Asn
 165 170 175
 Gln Lys Arg Gly Lys Arg His Tyr Glu Lys Lys Gln Lys Glu His Leu
 180 185 190
 Asp Thr Leu Asn Lys Lys Lys Arg Glu Leu Asp Met Lys Glu Lys Glu
 195 200 205
 Leu Glu Glu Lys Met Ser Gln Ala Arg Gln Ile Cys Pro Glu Arg Ile

210		215		220
Glu Val Glu Lys Ser Ala	Ser Ile Leu Asp Lys	Glu Ile Asn Arg Leu		
225	230	235	240	
Arg Gln Lys Ile Gln Ala	Glu His Ala Ser His	Gly Asp Arg Glu Glu		
	245	250	255	
Ile Met Arg Gln Tyr Gln	Glu Ala Arg Glu Thr	Tyr Leu Asp Leu Asp		
	260	265	270	
Ser Lys Val Arg Thr Leu	Lys Lys Phe Ile Lys	Leu Leu Gly Glu Ile		
	275	280	285	
Met Glu His Arg Phe Lys	Thr Tyr Gln Gln Phe	Arg Arg Cys Leu Thr		
	290	295	300	
Leu Arg Cys Lys Leu Tyr	Phe Asp Asn Leu Leu	Ser Gln Arg Ala Tyr		
305	310	315	320	
Cys Gly Lys Met Asn Phe	Asp His Lys Asn Glu	Thr Leu Ser Ile Ser		
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<210> 3661

<211> 1117

<212> DNA

<213> Homo sapiens

<400> 3661

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 180
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 300
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 360
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 420
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 480
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 600
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 660
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 900

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<210> 3662

<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

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			20					25					30		
Pro	Ser	Val	Tyr	Pro	Tyr	Lys	Leu	Tyr	Arg	Leu	Leu	Pro	Met	Lys	Cys
		35					40					45			
Lys	Arg	Ala	Pro	Tyr	Lys	Ser	Tyr	Arg	Asn	Ser	Ser	Tyr	Glu	Asn	Ala
	50					55				60					
Arg	Glu	Asn	Ser	Gln	Met	Asn	Glu	Ser	Ala	Pro	Gly	Thr	Tyr	Val	Val
65				70					75					80	
Gln	Asn	Pro	His	Ser	Ser	Glu	Leu	Pro	Thr	Leu	Asn	Phe	Gln	Asp	Thr
			85					90					95		
Val	Asn	Thr	Leu	Thr	Asn	Ser	Pro	Ala	Ile	Pro	Leu	Glu	Thr	Ser	Ala
			100					105					110		
Cys	Gln	Asp	Ile	Pro	Thr	Ser	Ala	Asn	Val	Gln	Asn	Ala	Glu	Gly	Thr
	115						120					125			
Lys	Trp	Gly	Glu	Glu	Ala	Leu	Lys	Met	Asp	Leu	Asp	Asn	Asn	Phe	Tyr
130						135				140					
Ser	Thr	Glu	Val	Ser	Val	Ser	Ser	Thr	Glu	Asn	Ala	Val	Ser	Ser	Asp
145					150					155					160
Leu	Arg	Ala	Gly	Asp	Val	Pro	Val	Leu	Ser	Leu	Ser	Asn	Ser	Ser	Glu
				165					170					175	
Asn	Ala	Ala	Ser	Val	Ile	Ser	Tyr	Ser	Gly	Ser	Ala	Pro	Ser	Val	Ile
			180					185					190		
Val	His	Ser	Ser	Gln	Phe	Ser	Ser	Val	Ile	Met	His	Ser	Asn	Ala	Ile
	195						200					205			
Ala	Ala	Met	Thr	Ser	Ser	Asn	His	Arg	Ala	Phe	Ser	Asp	Pro	Ala	Val
210						215					220				
Ser	Gln	Ser	Leu	Lys	Asp	Asp	Ser	Lys	Pro	Glu	Pro	Asp	Lys	Val	Gly
225					230					235				240	
Arg	Phe	Ala	Ser	Arg	Pro	Lys	Ser	Ile	Lys	Glu	Lys	Lys	Lys	Thr	Thr
				245					250					255	
Ser	His	Thr	Arg	Gly	Glu	Ile	Pro	Glu	Glu	Ser	Asn	Tyr	Val	Ala	Asp
			260					265					270		
Pro	Gly	Gly	Ser	Leu	Ser	Lys	Thr	Thr	Asn	Ile	Ala	Glu	Glu	Thr	Ser
	275						280					285			
Lys	Ile	Glu	Thr	Tyr	Ile	Ala	Lys	Pro	Ala	Leu	Pro	Gly	Thr	Ser	Thr
290						295					300				
Asn	Ser	Asn	Val	Ala	Pro	Leu	Cys	Gln	Ile	Thr	Val	Lys	Ile	Gly	Asn

305 310 315 320
 Glu Ala Ile Val Lys Arg His Ile Leu Gly Ser Lys Leu Phe Tyr Lys
 325 330 335
 Arg Gly Arg Arg Pro Lys Tyr Gln Met Gln Glu Glu Leu Leu Pro Gln
 340 345 350
 Gly Asn Asp Pro Glu Pro Ser Gly Asp Ser Pro Leu Gly Leu Cys Gln
 355 360 365
 Ser Glu Cys
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<210> 3663
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 3663
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 480
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 481

<210> 3664
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 3664
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 Met Ser Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr
 35 40 45
 Phe Leu Pro Ala Leu Tyr Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp
 50 55 60
 Asn Val Leu Glu Val Thr Ala Arg Ala Ile Thr Tyr Tyr Leu Asp Val
 65 70 75 80
 Ser Ala Glu Cys Thr Arg Arg Ile Val Gly Val Asp Gly Ala Ile Lys
 85 90 95
 Ala Leu Cys Asn Arg Leu Val Val Val Glu Leu Asn Asn Arg Thr Ser

	100		105		110										
Arg	Asp	Leu	Ala	Glu	Gln	Cys	Val	Lys	Val	Ser	Ile	Thr	Tyr	Trp	Leu
	115				120								125		
Ile	Thr	Tyr	Phe	Ser	Gln	Thr	Ser	Gln	Gly						
	130					135									

<210> 3665

<211> 6633

<212> DNA

<213> Homo sapiens

<400> 3665

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<210> 3670

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3670

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			20					25					30		
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
			35				40					45			
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
			50			55					60				
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
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Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
				85					90					95	
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
			115				120					125			
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
			130				135				140				
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
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			165					170						175	
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
			180				185					190			
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
			195				200					205			
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
			210				215					220			
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235				240	
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
				245					250					255	
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

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 Ala Asp Lys Asn Tyr Thr Glu Asp Leu Ser Lys Leu Gln Ser Leu Ile
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 Cys Gly Pro Ser Phe Asp Ile Ala Ser Ile Ile Pro Phe Leu Glu Pro
 290 295 300
 Leu Ser Glu Asp Thr Ile Ala Gly Leu Ser Val His Val Leu Cys Arg
 305 310 315 320
 Thr Arg Leu Lys Glu Tyr Glu Gln Cys Ile Asp Ile Leu Leu Glu Arg
 325 330 335
 Cys Pro Glu Ala Val Ile Pro Tyr Ala Asn His Glu Leu Lys Glu Glu
 340 345 350
 Asn Arg Thr Leu Trp Trp Lys Lys Leu Leu Pro Glu Leu Cys Gln Arg
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<210> 3671

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3671

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 180
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 420
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 540
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 660
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 720
 ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca tgcatttgca
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 828

<210> 3672

<211> 124
 <212> PRT
 <213> Homo sapiens

<400> 3672
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 35 40 45
 Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly
 50 55 60
 Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
 65 70 75 80
 Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys
 85 90 95
 Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala
 100 105 110
 Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val
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<210> 3673
 <211> 1052
 <212> DNA
 <213> Homo sapiens

<400> 3673
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 120
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 180
 aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgcttt cgcaagttcc
 240
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 300
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 420
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 480
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 660
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 720
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 780

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 900
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 960
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 1052

<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

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Phe	Ser	Val	Met	Val	His	Ser	Gly	Ser	Ala	Ala	Gly	Gly	His	Tyr	Tyr
			20					25					30		
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp
			35				40					45			
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly
	50					55					60				
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser
	65				70				75					80	
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn
				85					90					95	
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu
			100					105					110		
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu	
			115				120					125			
Ile	Glu	Arg	Asn	Thr	Cys	Lys	Ile	Lys	Leu	Phe	Cys	Leu	His	Pro	Thr
			130			135					140				
Lys	Gln	Val	Met	Met	Glu	Asn	Lys	Leu	Glu	Val	His	Lys	Asp	Lys	Thr
					150					155				160	
Leu	Lys	Glu	Ala	Val	Glu	Met	Ala	Tyr	Lys	Met	Met	Asp	Leu	Glu	Glu
				165					170					175	
Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His
			180					185					190		
Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly
		195					200					205			
Leu	Leu	Leu	Gly	Gly	Val	Lys	Ser	Thr	Tyr	Met	Phe	Asp	Leu	Leu	Leu
		210				215						220			
Glu	Thr	Arg	Lys	Pro	Asp	Gln	Val	Phe	Gln	Ser	Tyr	Lys	Pro	Gly	Gly
					230					235				240	
Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu
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<210> 3675

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3675

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 120
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 180
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 300
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 360
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 420
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 480
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 660
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 720
 aaaaattctc cactgcagca catccaggta tcaaatacaga gggttaaaga agccatagac
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<210> 3676

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3676

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Lys	Ala	Val	Val	Met	Thr	Arg	Asp	Asp	Ser	Ser	Gly	Gly	Trp	Phe	Pro
		20						25					30		
Gln	Glu	Gly	Gly	Gly	Ile	Ser	Arg	Val	Gly	Val	Cys	Lys	Val	Met	His
		35					40					45			
Pro	Glu	Gly	Asn	Gly	Arg	Ser	Gly	Phe	Leu	Ile	His	Gly	Glu	Arg	Gln
	50				55					60					
Lys	Asp	Lys	Leu	Val	Val	Leu	Glu	Cys	Tyr	Val	Arg	Lys	Asp	Leu	Val
65				70					75					80	
Tyr	Thr	Lys	Ala	Asn	Pro	Thr	Phe	His	His	Trp	Lys	Val	Asp	Asn	Arg
			85					90					95		
Lys	Phe	Gly	Leu	Thr	Phe	Gln	Ser	Pro	Ala	Asp	Ala	Arg	Ala	Phe	Asp
			100					105					110		
Arg	Gly	Val	Arg	Lys	Ala	Ile	Glu	Asp	Leu	Ile	Glu	Glu	Val	Glu	Asn

<212> DNA

<213> Homo sapiens

<400> 3679

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<210> 3680

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3680

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Tyr	Pro	Pro	Pro	Arg	Leu	Arg	Gln	Leu	Leu	Pro	Met	Leu	Leu	Gln	Gly
			20					25					30		
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln
			35				40					45			
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu
			50			55					60				
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr
65					70					75				80	
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro
				85					90				95		
Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser
			100					105					110		
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His
			115				120					125			
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu
			130				135				140				
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Leu	Ser	Arg	Phe	Val
145					150					155				160	
Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu
				165					170				175		
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180

185

<210> 3681

<211> 788

<212> DNA

<213> Homo sapiens

<400> 3681

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420
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<210> 3682

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3682

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20          25          30
Ile Ser Gly Arg Pro Cys Pro Gly Gly Pro Ala Pro Pro Arg His His
35          40          45
Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp Gly Leu Leu Arg
50          55          60
Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg
65          70          75          80
Lys Ala Val Pro Val Thr Ser Phe Thr Tyr Ile Asn Glu Asp Phe Arg

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				85						90					95				
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			100						105					110					
Gln	Arg	Ala	His	Asn	Ala	His	Leu	Arg	Gly	Pro	Pro	Pro	Lys	Leu	Ile				
		115					120						125						
Pro	Val	Ser	Gly	Lys	Leu	Glu	Lys	Asn	Ile	Glu	Lys	Ile	Leu	Ile	Arg				
	130						135					140							
Pro	Thr	Ala	Phe	Lys	Pro	Val	Leu	Pro	Lys	Pro	Arg	Gly	Ala	Pro	Ser				
145					150						155				160				
Leu	Pro	Ser	Phe	Met	Gly	Pro	Arg	Ala	Thr	Gly	Leu	Ser	Gly	Ser	Gln				
			165						170					175					
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			180					185											

<210> 3683

<211> 4421

<212> DNA

<213> Homo sapiens

<400> 3683

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 180
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<210> 3684

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3684

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		20						25					30		
Cys	Lys	Val	Arg	Leu	Leu	Asp	Gly	Gly	Asp	Phe	Val	Ser	Leu	Ser	Ser
		35					40					45			
Arg	Glu	Glu	Val	Gln	Glu	Asn	Cys	Val	Arg	Trp	Arg	Lys	Arg	Phe	Thr
	50					55				60					
Phe	Val	Cys	Lys	Met	Ser	Ala	Asn	Pro	Ala	Thr	Gly	Leu	Leu	Asp	Pro
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Cys	Val	Phe	Arg	Val	Ser	Val	Arg	Lys	Glu	Leu	Lys	Gly	Gly	Lys	Ala
			85						90					95	
Tyr	Ser	Lys	Leu	Gly	Phe	Ala	Asp	Leu	Asn	Leu	Ala	Glu	Phe	Ala	Gly
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Ser	Gly	Ser	Thr	Val	Arg	Cys	Cys	Leu	Leu	Glu	Gly	Tyr	Asp	Thr	Lys
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Asn	Thr	Arg	Gln	Asp	Asn	Ser	Ile	Leu	Lys	Val	Thr	Ile	Gly	Met	Phe
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Leu	Leu	Ser	Gly	Asp	Pro	Cys	Phe	Lys	Thr	Pro	Pro	Ser	Thr	Ala	Lys
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			165					170						175	
Gly	Gly	Gly	Thr	Ser	Ser	Gly	Gly	Ser	Ser	Thr	Asn	Ser	Leu	Thr	Gly
		180						185					190		
Ser	Arg	Pro	Pro	Lys	Ala	Arg	Pro	Thr	Ile	Leu	Ser	Ser	Gly	Leu	Pro
	195						200					205			
Glu	Glu	Pro	Asp	Gln	Asn	Leu	Ser	Ser	Pro	Glu	Glu	Val	Phe	His	Ser
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Gly	His	Ser	Arg	Asn	Ser	Ser	Tyr	Ala	Ser	Gln	Gln	Ser	Lys	Ile	Ser
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Gly	Tyr	Ser	Thr	Glu	His	Ser	His	Ser	Ser	Ser	Leu	Ser	Asp	Leu	Thr
			245						250					255	
His	Arg	Arg	Asn	Thr	Ser	Thr	Ser	Ser	Ser	Ala	Ser	Gly	Gly	Leu	Gly
		260						265					270		
Met	Thr	Val	Glu	Gly	Pro	Glu	Gly	Ser	Glu	Arg	Glu	His	Arg	Pro	Pro
	275						280					285			
Glu	Lys	Pro	Pro	Arg	Pro	Pro	Arg	Pro	Leu	His	Leu	Ser	Asp	Arg	Ser
	290					295					300				
Phe	Arg	Arg	Lys	Lys	Asp	Ser	Val	Glu	Ser	His	Pro	Thr	Trp	Val	Asp
305					310					315				320	
Asp	Thr	Arg	Ile	Asp	Ala	Asp	Ala	Ile	Val	Glu	Lys	Ile	Val	Gln	Ser

	325		330		335
Gln Asp Phe Thr Asp Gly Ser Asn Thr Glu Asp Ser Asn Leu Arg Leu					
	340		345		350
Phe Val Ser Arg Asp Gly Ser Ala Thr Leu Ser Gly Ile Gln Leu Ala					
	355		360		365
Thr Arg Val Ser Ser Gly Val Tyr Glu Pro Val Val Ile Glu Ser His					
	370		375		380

<210> 3685

<211> 1293

<212> DNA

<213> Homo sapiens

<400> 3685

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 1200

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1293

<210> 3686
<211> 111
<212> PRT
<213> Homo sapiens

<400> 3686
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Pro Val Cys Cys Glu Thr Asp His Arg Pro Ala Gln Arg Ser Pro Arg
35 40 45
Arg Val Pro Cys Leu Cys Pro Pro Arg Arg Arg His Pro Pro Arg Ser
50 55 60
Phe Thr Ser Cys Thr Phe Ser Gly Ser Arg Ser His Ile His Pro Thr
65 70 75 80
Trp Arg Ser Pro His Asp Val Pro Gly Ser Val Leu Ala Pro Ala Ala
85 90 95
Ala Leu Gly Asn Arg Ile Gly Lys Arg Ser Pro Arg Val Asp Ala
100 105 110

<210> 3687
<211> 566
<212> DNA
<213> Homo sapiens

<400> 3687
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240
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<210> 3688

<211> 57
 <212> PRT
 <213> Homo sapiens

<400> 3688
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 Glu Tyr Pro Pro Gly Leu Leu Val Ala Val His Leu Phe Ala Leu Met
 35 40 45
 Xaa Leu His Val Ser Ala Ala Pro His
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<210> 3689
 <211> 1562
 <212> DNA
 <213> Homo sapiens

<400> 3689
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1562

<210> 3690

<211> 504

<212> PRT

<213> Homo sapiens

<400> 3690

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			20					25					30		
Thr	Asp	Glu	Ala	Glu	Lys	Arg	Ser	Arg	Lys	Pro	Glu	Lys	Glu	Pro	Arg
			35				40					45			
Arg	Ser	Gly	Arg	Ala	Thr	Asn	His	Asp	Ser	Cys	Asp	Ser	Cys	Lys	Glu
			50			55					60				
Gly	Gly	Asp	Leu	Leu	Cys	Cys	Asp	His	Cys	Pro	Ala	Ala	Phe	His	Leu
65					70					75				80	
Gln	Cys	Cys	Asn	Pro	Pro	Leu	Ser	Glu	Glu	Met	Leu	Pro	Pro	Gly	Glu
			85						90					95	
Trp	Met	Cys	His	Arg	Cys	Thr	Val	Arg	Arg	Lys	Lys	Arg	Glu	Gln	Lys
			100					105					110		
Lys	Glu	Leu	Gly	His	Val	Asn	Gly	Leu	Val	Asp	Lys	Ser	Gly	Lys	Arg
			115				120					125			
Thr	Thr	Ser	Pro	Ser	Ser	Asp	Thr	Asp	Leu	Leu	Asp	Arg	Ser	Ala	Ser
			130			135					140				
Lys	Thr	Glu	Leu	Lys	Ala	Ile	Ala	His	Ala	Arg	Ile	Leu	Glu	Arg	Arg
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			165						170					175	
Thr	Ser	Glu	Gln	Asn	Asp	Val	Asp	Glu	Asp	Ile	Ile	Asp	Val	Asp	Glu
			180					185					190		
Glu	Pro	Val	Ala	Ala	Glu	Pro	Asp	Tyr	Val	Gln	Pro	Gln	Leu	Arg	Arg
			195				200					205			
Pro	Phe	Glu	Leu	Leu	Ile	Ala	Ala	Ala	Met	Glu	Arg	Asn	Pro	Thr	Gln

210	215	220
Phe Gln Leu Pro Asn Glu	Leu Thr Cys Thr Thr	Ala Leu Pro Gly Ser
225	230	235
Ser Lys Arg Arg Arg Lys	Glu Glu Thr Thr Gly	Lys Asn Val Lys Lys
245	250	255
Thr Gln His Glu Leu Asp	His Asn Gly Leu Val	Pro Leu Pro Val Lys
260	265	270
Val Cys Phe Thr Cys Asn	Arg Ser Cys Arg Val	Ala Pro Leu Ile Gln
275	280	285
Cys Asp Tyr Cys Pro Leu	Leu Phe His Met Asp	Cys Leu Glu Pro Pro
290	295	300
Leu Thr Ala Met Pro Leu	Gly Arg Trp Met Cys	Pro Asn His Ile Glu
305	310	315
His Val Val Leu Asn Gln	Lys Asn Met Thr Leu	Ser Asn Arg Cys Gln
325	330	335
Val Phe Asp Arg Phe Gln	Asp Thr Val Ser Gln	His Val Val Lys Val
340	345	350
Asp Phe Leu Asn Arg Ile	His Lys His Pro Pro	Asn Arg Arg Val
355	360	365
Leu Gln Ser Val Lys Arg	Arg Ser Leu Lys Val	Pro Asp Ala Ile Lys
370	375	380
Ser Gln Tyr Gln Phe Pro	Pro Pro Leu Ile Ala	Pro Ala Ala Ile Arg
385	390	395
Asp Gly Glu Leu Ile Cys	Asn Gly Ile Pro Glu	Glu Ser Gln Met His
405	410	415
Leu Leu Asn Ser Glu His	Leu Ala Thr Gln Ala	Glu Gln Gln Glu Trp
420	425	430
Leu Cys Ser Val Val Ala	Leu Gln Cys Ser Ile	Leu Lys His Leu Ser
435	440	445
Ala Lys Gln Met Pro Ser	His Trp Asp Ser Glu	Gln Thr Glu Lys Ala
450	455	460
Asp Ile Lys Pro Val Ile	Val Thr Asp Ser Ser	Val Thr Thr Ser Leu
465	470	475
Gln Thr Ala Asp Lys Thr	Pro Thr Pro Ser His	Tyr Pro Leu Ser Cys
485	490	495
Pro Ser Gly Ile Ser Thr	Gln Asn	
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<210> 3691

<211> 418

<212> DNA

<213> Homo sapiens

<400> 3691

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gaagacacct ctatcactcc caaattaaaa atattcttat ctcaaactac ttccatggc
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<210> 3692
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3692
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 20 25 30
 Ala Arg Gln Ser Trp Gly Gln Cys Gln Pro Phe Tyr Val Leu Arg Gln
 35 40 45
 Arg Ile Ala Arg Ile Arg Cys Gln Leu Lys Ala Val Cys Gln Pro Arg
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 Cys Lys His Gly Glu Cys Ile Gly Pro Asn Lys Cys Lys Cys His Pro
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 Gly Tyr Ala Gly Lys Thr Cys Asn Gln Gly Arg Lys Thr Val
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<210> 3693
 <211> 2641
 <212> DNA
 <213> Homo sapiens

<400> 3693
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<212> PRT

<213> Homo sapiens

<400> 3694

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<211> 1615

<212> DNA

<213> Homo sapiens

<400> 3695

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<212> PRT

<213> Homo sapiens

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Tyr	Ala	Gly	Lys	Thr	Cys	Asn	Gln	Asp	Leu	Asn	Glu	Cys	Gly	Leu	Lys
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Cys	Tyr	Cys	Leu	Asn	Gly	Tyr	Met	Leu	Met	Pro	Asp	Gly	Ser	Cys	Ser
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Ser	Ala	Leu	Thr	Cys	Ser	Met	Ala	Asn	Cys	Gln	Tyr	Gly	Cys	Asp	Val
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Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Ile	Cys	Asn	Lys	Cys
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Phe	Thr	Arg	Ser	Ala	Val	Leu	Arg	Arg	His	Lys	Lys	Met	His	Cys	Lys
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<210> 3704

<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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305          310          315          320
Gly Lys Met Arg Leu Thr Val Pro Cys Arg Ala Leu Thr Cys Ala His
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Asp Gly Leu Gln Tyr Ser Pro Val Gln Gly Gly Asp Pro Ser Glu Asn
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Lys Lys Lys Val Glu Val Ile Asp Leu Thr Ile Glu Ser Ser Ser Asp
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Glu Glu Asp Leu Pro Pro Thr Lys Lys His Cys Ser Val Thr Ser Ala
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Gln Pro Ser Ser Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Gly
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Glu Ser Gln His Tyr Gly Pro Ser Val Ile Thr Ser Leu Asp Glu Gln
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Leu Gly Pro Leu Ala Pro Thr Leu Gly Ser Ser His Cys Ser Ala Thr
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Pro Ala Pro Pro Pro Gly Arg Val Ser Ser Ile Val Ala Pro Gly Gly
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<210> 3705

<211> 1737

<212> DNA

<213> Homo sapiens

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 65 70 75 80
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 85 90 95
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 115 120 125
 Thr Cys Val His Val Gln Thr Ala Tyr Leu Cys Thr Cys Val Cys Pro
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 Gly Asn Ile Cys Thr Cys Val Ser Val Glu Ala Ala Leu Ser Val Cys
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 Glu Asn Ala Phe Asp Asn Ile Gln Leu Pro Tyr Met Ile Lys Thr Leu
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 Lys Lys Leu Gly Ile Glu Gly Met Tyr Leu Asn Val Ile Lys Ala Val
 50 55 60
 Tyr Asp Arg Pro Xaa Val Ser Ile Ile Leu Asn Gly Glu Asn Leu Gln
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<210> 3709
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<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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			20					25					30		
Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
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<210> 3711

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3711

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<210> 3712

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712

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Leu	Gly	Arg	Gly	Phe	Asn	Thr	Gly	Val	Ile	Leu	Leu	Arg	Leu	Asp	Arg
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Leu	Arg	Gln	Ala	Gly	Trp	Glu	Gln	Met	Trp	Arg	Leu	Thr	Ala	Arg	Arg
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Glu	Leu	Leu	Ser	Leu	Pro	Ala	Ala	Ser	Leu	Ala	Asp	Gln	Asp	Ile	Phe
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Asn	Ala	Val	Ile	Lys	Glu	His	Pro	Gly	Leu	Val	Gln	Arg	Leu	Pro	Cys
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Val	Trp	Asn	Val	Gln	Leu	Ser	Asp	His	Thr	Leu	Ala	Glu	Arg	Cys	Tyr
			100					105					110		
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			115					120				125			
Leu	Arg	Val	Lys	Asn	Lys	His	Val	Glu	Phe	Phe	Arg	Asn	Phe	Tyr	Leu
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Thr	Phe	Leu	Glu	Tyr	Asp	Gly	Asn	Leu	Leu	Arg	Arg	Glu	Leu	Phe	Val
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Cys	Pro	Ser	Gln	Pro	Pro	Pro	Gly	Ala	Glu	Gln	Leu	Gln	Gln	Ala	Leu
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Ala	Gln	Leu	Asp	Glu	Glu	Asp	Pro	Cys	Phe	Glu	Phe	Arg	Gln	Gln	Gln
			180					185					190		
Leu	Thr	Val	His	Arg	Val	His	Val	Thr	Phe	Leu	Pro	His	Glu	Pro	Pro
			195					200					205		
Pro	Pro	Arg	Pro	His	Asp	Val	Thr	Leu	Val	Ala	Gln	Leu	Ser	Met	Asp
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<213> Homo sapiens
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2861

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<211> 488

<212> PRT

<213> Homo sapiens

<400> 3714

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Thr	Pro	Val	Gln	Asp	Glu	Arg	Asp	Ser	Gly	Ser	Asp	Gly	Glu	Asp	Asp
		20						25					30		
Val	Asn	Glu	Gln	His	Ser	Gly	Ser	Asp	Thr	Gly	Ser	Val	Glu	Arg	His
		35					40					45			
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		50				55					60				
His	Val	Thr	Asp	Ser	Glu	Asn	Asp	Glu	Pro	Leu	Asn	Leu	Asn	Ala	Ser
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Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser	Glu
			85					90					95		
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		100						105					110		
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 Ile Glu Glu Leu Gln Lys Ser Pro Ala Ser Asp Ser Glu Thr Glu Asp
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 His Gln Ala Ser Asp Ser Glu Asn Glu Glu Pro Pro Lys Pro Arg Met
 195 200 205
 Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser
 210 215 220
 Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu
 225 230 235 240
 Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro
 245 250 255
 Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg
 260 265 270
 Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp
 275 280 285
 Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser
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 Glu Gly Pro Gln Lys Gly Pro Ala Ser Asp Ser Glu Thr Glu Asp Ala
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 Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly
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 385 390 395 400
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 405 410 415
 Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg
 420 425 430
 Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu
 435 440 445
 Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu
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<211> 288

<212> DNA

<213> Homo sapiens

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 180
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<212> PRT

<213> Homo sapiens

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			20				25						30		
Gly	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu	Lys	His	Arg	Lys	Asp
		35				40						45			
Lys	Ala	His	Lys	Arg	Tyr	Leu	Leu	Met	Ser	Ile	Asp	Gln	Arg	Lys	Lys
	50					55					60				
Met	Leu	Lys	Asn	Leu	Arg	Asn	Thr	Asn	Tyr	Asp	Val	Phe	Glu	Lys	Ile
65				70					75					80	
Cys	Trp	Gly	Leu	Gly	Ile	Glu	Tyr	Thr	Phe	Pro	Pro	Leu	Tyr	Tyr	Arg
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<212> DNA

<213> Homo sapiens

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 180
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 240
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 <213> Homo sapiens

<400> 3718
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 35 40 45
 His Leu Ile Leu Asp Ser Ser Ser Lys Ile Cys Asp Leu Asn Ala Asn
 50 55 60
 Thr Glu Ser Glu Val Pro Gly Gly Gln Ser Val Gly Val Gln Gly Glu
 65 70 75 80
 Ala Ala Cys Val Ser Ile Pro His Leu Asp Leu Lys Asn Val Ser Asp
 85 90 95
 Gly Asp Lys Trp Glu Glu Pro Phe Pro Ala Phe Lys Ser Trp Gln Glu
 100 105 110
 Asp Ser Glu Ser Gly Glu Ala Gln Leu Ser Pro Gln Ala Gly Arg Met
 115 120 125
 Asn His His Pro Leu Glu Glu Asp Cys Pro Pro Val Leu Ser His Arg

130 135 140
 Ser Leu Asp Phe Gly Gln Ser Gln Arg Phe Leu His Asp Pro Glu Lys
 145 150 155 160
 Leu Asp Ser Ser Ser Lys Ala Leu Ser Phe Thr Arg Ile Arg Arg Ser
 165 170 175
 Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln
 180 185 190
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 195 200 205
 Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn
 210 215 220
 Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln
 225 230 235 240
 Ile Lys Asp Ala Lys His Lys Asn Ser Asp Gly Glu Phe Val Pro Gln
 245 250 255
 Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu
 260 265 270
 Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys
 275 280 285
 Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg
 290 295 300
 Leu Lys Glu Lys Arg Ile Glu Arg Cys Leu Pro Glu Asp Ile Lys Lys
 305 310 315 320
 Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser
 325 330 335
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<210> 3719

<211> 422

<212> DNA

<213> Homo sapiens

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<210> 3720
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      20           25           30
Asn Gln Lys Lys Phe Glu Cys Asn Ser Arg Gln Pro Gly Cys Lys Asn
      35           40           45
Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala
      50           55           60
Leu Gln Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His
      65           70           75           80
Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr
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<210> 3721
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<400> 3721

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720

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<211> 1216

<212> PRT

<213> Homo sapiens

<400> 3722

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Glu	Arg	Lys	Lys	Arg	Leu	Gln	Leu	Tyr	Val	Phe	Val	Met	Arg	Cys	Ile
		20					25					30			
Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
		35				40					45				
Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
	50				55			60							
Ala	Phe	Leu	Asn	Gly	Glu	Thr	Gln	Ile	Met	Ala	Asp	Glu	Ala	Phe	Met
65				70				75					80		
Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
			85				90					95			
Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
		100				105					110				
Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
	115				120			125							
Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
	130				135			140							
Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
145				150				155					160		
Met	Thr	Ala	Ser	Ala	Ala	Ser	Glu	Leu	Ile	Leu	Ser	Lys	Glu	Gln	Leu

2871

595 600 605
 Gly Trp Phe Ser Pro Gly Gln Val Phe Val Leu Asp Glu Tyr Cys Ala
 610 615 620
 Arg Asn Gly Val Arg Gly Cys His Arg His Leu Cys Tyr Leu Arg Asp
 625 630 635 640
 Leu Leu Glu Arg Ala Glu Asn Gly Ala Met Ile Asp Pro Thr Leu Leu
 645 650 655
 His Tyr Ser Phe Ala Phe Cys Ala Ser His Val His Gly Asn Arg Pro
 660 665 670
 Asp Gly Ile Gly Thr Val Thr Val Glu Glu Lys Glu Arg Phe Glu Glu
 675 680 685
 Ile Lys Glu Arg Leu Arg Val Leu Leu Glu Asn Gln Ile Thr His Phe
 690 695 700
 Arg Tyr Cys Phe Pro Phe Gly Arg Pro Glu Gly Ala Leu Lys Ala Thr
 705 710 715 720
 Leu Ser Leu Leu Glu Arg Val Leu Met Lys Asp Ile Val Thr Pro Val
 725 730 735
 Pro Gln Glu Glu Val Lys Thr Val Ile Arg Lys Cys Leu Glu Gln Ala
 740 745 750
 Ala Leu Val Asn Tyr Ser Arg Leu Ser Glu Tyr Ala Lys Ile Glu Glu
 755 760 765
 Asn Gln Lys Asp Ala Glu Asn Val Gly Arg Leu Ile Thr Pro Ala Lys
 770 775 780
 Lys Leu Glu Asp Thr Ile Arg Leu Ala Glu Leu Val Ile Glu Val Leu
 785 790 795 800
 Gln Gln Asn Glu Glu His His Ala Glu Pro His Val Asp Lys Gly Glu
 805 810 815
 Ala Phe Ala Trp Trp Ser Asp Leu Met Val Glu His Ala Glu Thr Phe
 820 825 830
 Leu Ser Leu Phe Ala Val Asp Met Asp Ala Ala Leu Glu Val Gln Pro
 835 840 845
 Pro Asp Thr Trp Asp Ser Phe Pro Leu Phe Gln Leu Leu Asn Asp Phe
 850 855 860
 Leu Arg Thr Asp Tyr Asn Leu Cys Asn Gly Lys Phe His Lys His Leu
 865 870 875 880
 Gln Asp Leu Phe Ala Pro Leu Val Val Arg Tyr Val Asp Leu Met Glu
 885 890 895
 Ser Ser Ile Ala Gln Ser Ile His Arg Gly Phe Glu Arg Glu Ser Trp
 900 905 910
 Glu Pro Val Asn Asn Gly Ser Gly Thr Ser Glu Asp Leu Phe Trp Lys
 915 920 925
 Leu Asp Ala Leu Gln Thr Phe Ile Arg Asp Leu His Trp Pro Glu Glu
 930 935 940
 Glu Phe Gly Lys His Leu Glu Gln Arg Leu Lys Leu Met Ala Ser Asp
 945 950 955 960
 Met Ile Glu Ser Cys Val Lys Arg Thr Arg Ile Ala Phe Glu Val Lys
 965 970 975
 Leu Gln Lys Thr Ser Arg Ser Thr Asp Phe Arg Val Pro Gln Ser Ile
 980 985 990
 Cys Thr Met Phe Asn Val Met Val Asp Ala Lys Ala Gln Ser Thr Lys
 995 1000 1005
 Leu Cys Ser Met Glu Met Gly Gln Glu Phe Ala Lys Met Trp His Gln
 1010 1015 1020
 Tyr His Ser Lys Ile Asp Glu Leu Ile Glu Glu Thr Val Lys Glu Met

1025 1030 1035 1040
 Ile Thr Leu Leu Val Ala Lys Phe Val Thr Ile Leu Glu Gly Val Leu
 1045 1050 1055
 Ala Lys Leu Ser Arg Tyr Asp Glu Gly Thr Leu Phe Ser Ser Phe Leu
 1060 1065 1070
 Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro
 1075 1080 1085
 Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln
 1090 1095 1100
 Asp Val Leu Arg Asp Lys Val Asn Glu Glu Met Tyr Ile Glu Arg Leu
 1105 1110 1115 1120
 Phe Asp Gln Trp Tyr Asn Ser Ser Met Asn Val Ile Cys Thr Trp Leu
 1125 1130 1135
 Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu
 1140 1145 1150
 Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val
 1155 1160 1165
 Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg
 1170 1175 1180
 Leu Thr Val Glu Glu Ala Thr Ala Ser Val Ser Glu Gly Gly Gly Leu
 1185 1190 1195 1200
 Gln Gly Ile Ser Met Lys Asp Ser Asp Glu Glu Asp Glu Glu Asp Asp
 1205 1210 1215

<210> 3723

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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 120
 aaccccaacg agaagctgaa ggtgaacttt gggaccccag agttcctgtc acctgagggtg
 180
 gtgaattatg accaaatctc cgataagaca gacatgtgga gtatgggggt gatcacctac
 240
 atgctgtctg gggcctctc ccccttcctg ggagatgatg acacagagac cctaaacaac
 300
 gttctatctg gcaactggtg ctttgatgaa gagacctttg aggccgtatc agacgaggcc
 360
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 420
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 480
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 540
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 600
 ctgggggtct gagccctggg cgagctgaa gcctggacgc agccacacag tggccggggc
 660
 tgaagccaca cagcccagaa ggccagaaaa ggcagccaga tccccagggc agcctcgtaa
 720

ggacaaggct gtgccaggct gggaggctcg gggctcccca cgcceccatg cagtgaccgc
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 830

<210> 3724

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3724

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Glu	Asn	Ile	Leu	Cys	Val	Asn	Thr	Thr	Gly	His	Leu	Val	Lys	Ile	Ile
			20					25					30		
Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Asn	Pro	Asn	Glu	Lys	Leu	Lys	Val
		35					40					45			
Asn	Phe	Gly	Thr	Pro	Glu	Phe	Leu	Ser	Pro	Glu	Val	Val	Asn	Tyr	Asp
		50				55					60				
Gln	Ile	Ser	Asp	Lys	Thr	Asp	Met	Trp	Ser	Met	Gly	Val	Ile	Thr	Tyr
65				70						75				80	
Met	Leu	Leu	Ser	Gly	Leu	Ser	Pro	Phe	Leu	Gly	Asp	Asp	Asp	Thr	Glu
				85					90					95	
Thr	Leu	Asn	Asn	Val	Leu	Ser	Gly	Asn	Trp	Tyr	Phe	Asp	Glu	Glu	Thr
			100					105					110		
Phe	Glu	Ala	Val	Ser	Asp	Glu	Ala	Lys	Asp	Phe	Val	Ser	Asn	Leu	Ile
		115					120					125			
Val	Lys	Asp	Gln	Arg	Ala	Arg	Met	Asn	Ala	Ala	Gln	Cys	Leu	Ala	His
		130				135					140				
Pro	Trp	Leu	Asn	Asn	Leu	Ala	Glu	Lys	Ala	Lys	Arg	Cys	Asn	Arg	Arg
145				150						155				160	
Leu	Lys	Ser	Gln	Ile	Leu	Leu	Lys	Lys	Tyr	Leu	Met	Lys	Arg	Arg	Trp
			165						170				175		
Lys	Lys	Asn	Phe	Ile	Ala	Val	Ser	Ala	Ala	Asn	Arg	Phe	Lys	Lys	Ile
		180						185					190		
Ser	Ser	Ser	Gly	Ala	Leu	Met	Ala	Leu	Gly	Val					
		195						200							

<210> 3725

<211> 1244

<212> DNA

<213> Homo sapiens

<400> 3725

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 120
 gaccatcttc acttttgttt tcaggccttt aaaattgtgc cctacaacac agagaccctt
 180
 gataaactgc taaccgaatc cctgaagaac aatatccctg caagcggact gcacctcttt
 240
 ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgccc
 300

accctgttgc attttgcctgc gaagtatgga ctgaagaacc tcactgcctt gttgctcacc
 360
 tgcccaggag ccttgcaggc gtacagcgtg gccacaagc atggccacta cccaacacc
 420
 atcgctgaga aacacggctt caggacctg cggcagttca tcgacgagta tgtggaaacg
 480
 gtggacatgc tcaagagtca cattaagag gaactgatgc acggggagga ggctgatgct
 540
 gtgtacgagt ccatggcca cctttccaca gacctgtta tgaaatgctc gctcaacccc
 600
 ggctgtgacg aggatctcta tgagtccatg gctgcctttg tcccagctgc cactgaagac
 660
 ctctatgttg aaatgcttca ggccagtaca tctaaccxaa tccctggaga tggtttctct
 720
 cgggccacta aggactctat gatccgcaag tttttagaag gcaacagcat gggaatgacc
 780
 aatctggaga gagatcagtg ccatcttggc caggaagaag atgtttatca cacggtggat
 840
 gacgatgagg ccttttctgt ggacttggcc agcaggcccc ctgtcccagt gccagacca
 900
 gagaccactg ctctgtgtgc tcaccagctg cctgacaacg aaccatacat ttttaaaggc
 960
 aagtatggca gggaaatgatg tccaactggc tctttggagc ttctcaacag ggatttctg
 1020
 gatgacctgg ctttttgaa cttgtctcag agactatccc cttctaaatg gtcttcaccc
 1080
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 1140
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 1244

<210> 3726

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3726

Xaa	Ile	His	Val	Ser	Gly	Lys	Asp	Ile	Thr	Arg	Lys	Pro	Glu	Ile	Ser
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Gly	His	Val	Ile	Ser	Ala	His	Gly	Leu	Ser	Val	Leu	Asn	Leu	Arg	Asp
		20						25					30		
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
		35						40					45		
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
	50					55					60				
Thr	Glu	Ser	Leu	Lys	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe	
65				70					75					80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp	
			85					90					95		
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
			100					105					110		
Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

115	120	125
Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys		
130	135	140
His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr		
145	150	155
Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu		160
	165	170
Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu		175
	180	185
Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu		190
	195	200
Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu		205
	210	215
Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser		220
225	230	235
Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser		240
	245	250
Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu		255
	260	265
Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp		270
	275	280
Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala		285
	290	295
Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly		300
305	310	315
Lys Tyr Gly Arg Glu		320
	325	

<210> 3727

<211> 630

<212> DNA

<213> Homo sapiens

<400> 3727

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120ctcgaccccg ctgagaaaca agaaacaggc tgtctctctt tgggtctgga gtccttgcca
180gtttcagata gccggcttga ggcattccagc agccagtcct ttggtcttgg accacaccga
240ggacggctca acattcagtc aggcctggag gacggcgatc tatatgatgg agcctgggtg
300gctgaggagc aggacgccga tccatgggtt caggtggacg ctgggcaccc caccgcttc
360tcgggtgtta tcacacaggg caggaactct gtctggaggt atgactgggt cacatcatac
420aaggtccagt tcagcaatga cagtcggacc tgggtgggaa gtaggaacca cagcagtggtg
480atggacgcag tatttctgc caattcagac ccagaaactc cagtgtgaa cctcctgccg
540gagccccagg tggccccgtt cattcgctg ctgccccaga cctgggtcca gggaggcgcg
600

ccttgccctcc gggcagagat cctggcctgc
630

<210> 3728

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3728

Arg Ile Arg Val Ile Lys Lys Lys Lys Val Ile Met Lys Lys Arg Lys
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Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu
20 25 30
Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu
35 40 45
Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser
50 55 60
Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg
65 70 75 80
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp
85 90 95
Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val
100 105 110
Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg
115 120 125
Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe
130 135 140
Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly
145 150 155 160
Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu
165 170 175
Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro
180 185 190
Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu
195 200 205
Ala Cys
210

<210> 3729

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 3729

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120
atcaagttat cagcagatgt caaaccattt gtccccagat ttgccgggct caatgtggca
180
tggttagagt cctcagaagc atgtgtcttc cccagctctg cagccacata ctatccgttt
240
gttcaggaac caccagtgc agagcagaaa atatatactg aagacatggc ctttgagct
300

tcaacttttc cacctcagta tttatcttct gagataactc ttcattccata tgcctattct
 360
 ccttataccc ttgactccac acagaatggt tactcagtgc ctggctccca gtatctttat
 420
 aaccaaccca gttgttaccg aggttttcaa acagtgaagc atcgaaatga gaacacatgc
 480
 cctctccac aagaaatgaa agctctgttt aagaagaaaa cctatgatga gaaaaaacg
 540
 tatgatcagc aaaagtttga cagtgaagg gctgatggaa ctatatcatc tgagataaaa
 600
 tcagctagag gttcacatca tttgtccatt tacgctgaga atagtttgaa atcagatggt
 660
 taccataagc gaacagacag gaaatccaga atcattgcaa aaaatgtatc tacctccaaa
 720
 cctgagtttg aatttaccac actggacttt cctgaactgc aagggtgcaga gaacaatatg
 780
 tcagagatac agaagcaacc caagtgggga cctgtccact ctgtctctac cgacatttct
 840
 cttctaagag aagtagtaaa accagctgca gtgttatcaa aggggtgaaat agtggtgaaa
 900
 aataacccaa atgaatctgt aactgcta atgcgtacca attctccttc atgtacaaga
 960
 gagttatctt ggacaccaat ggggttatgtt gttcgacaga cattatctac agaactgtca
 1020
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 1080
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 1140
 gaaaaacaca ttattcatcc taccctaaaag tctaaagcat cacaaggtag tgaccttgaa
 1200
 caaaatgaag cctcaagaaa gaataagaaa aagaagaaa aatctacatc aaaatatgaa
 1260
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 1320
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 1440
 ggcattgctga cagccctgga gaagaagcag cactctcagc atgcaaagca gtcctccaaa
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 1552

<210> 3730

<211> 422

<212> PRT

<213> Homo sapiens

<400> 3730

Met	Ala	Phe	Gly	Ala	Ser	Thr	Phe	Pro	Pro	Gln	Tyr	Leu	Ser	Ser	Glu
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Ile	Thr	Leu	His	Pro	Tyr	Ala	Tyr	Ser	Pro	Tyr	Thr	Leu	Asp	Ser	Thr
			20					25				30			
Gln	Asn	Val	Tyr	Ser	Val	Pro	Gly	Ser	Gln	Tyr	Leu	Tyr	Asn	Gln	Pro

35					40					45					
Ser	Cys	Tyr	Arg	Gly	Phe	Gln	Thr	Val	Lys	His	Arg	Asn	Glu	Asn	Thr
50					55					60					
Cys	Pro	Leu	Pro	Gln	Glu	Met	Lys	Ala	Leu	Phe	Lys	Lys	Lys	Thr	Tyr
65					70					75					80
Asp	Glu	Lys	Lys	Thr	Tyr	Asp	Gln	Gln	Lys	Phe	Asp	Ser	Glu	Arg	Ala
				85					90					95	
Asp	Gly	Thr	Ile	Ser	Ser	Glu	Ile	Lys	Ser	Ala	Arg	Gly	Ser	His	His
			100					105						110	
Leu	Ser	Ile	Tyr	Ala	Glu	Asn	Ser	Leu	Lys	Ser	Asp	Gly	Tyr	His	Lys
			115					120						125	
Arg	Thr	Asp	Arg	Lys	Ser	Arg	Ile	Ile	Ala	Lys	Asn	Val	Ser	Thr	Ser
Lys	Pro	Glu	Phe	Glu	Phe	Thr	Thr	Leu	Asp	Phe	Pro	Glu	Leu	Gln	Gly
145					150					155					160
Ala	Glu	Asn	Asn	Met	Ser	Glu	Ile	Gln	Lys	Gln	Pro	Lys	Trp	Gly	Pro
				165					170					175	
Val	His	Ser	Val	Ser	Thr	Asp	Ile	Ser	Leu	Leu	Arg	Glu	Val	Val	Lys
			180					185						190	
Pro	Ala	Ala	Val	Leu	Ser	Lys	Gly	Glu	Ile	Val	Val	Lys	Asn	Asn	Pro
			195					200						205	
Asn	Glu	Ser	Val	Thr	Ala	Asn	Ala	Ala	Thr	Asn	Ser	Pro	Ser	Cys	Thr
Arg	Glu	Leu	Ser	Trp	Thr	Pro	Met	Gly	Tyr	Val	Val	Arg	Gln	Thr	Leu
225					230					235					240
Ser	Thr	Glu	Leu	Ser	Ala	Ala	Pro	Lys	Asn	Val	Thr	Ser	Met	Ile	Asn
				245					250					255	
Leu	Lys	Thr	Ile	Ala	Ser	Ser	Ala	Asp	Pro	Lys	Asn	Val	Ser	Ile	Pro
			260					265						270	
Ser	Ser	Glu	Ala	Leu	Ser	Ser	Asp	Pro	Ser	Tyr	Asn	Lys	Glu	Lys	His
			275					280						285	
Ile	Ile	His	Pro	Thr	Gln	Lys	Ser	Lys	Ala	Ser	Gln	Gly	Ser	Asp	Leu
Glu	Gln	Asn	Glu	Ala	Ser	Arg	Lys	Asn	Lys	Lys	Lys	Lys	Glu	Lys	Ser
305					310					315					320
Thr	Ser	Lys	Tyr	Glu	Val	Leu	Thr	Val	Gln	Glu	Pro	Pro	Arg	Ile	Glu
				325					330					335	
Asp	Ala	Glu	Glu	Phe	Pro	Asn	Leu	Ala	Val	Ala	Ser	Glu	Arg	Arg	Asp
			340					345						350	
Arg	Ile	Glu	Thr	Pro	Lys	Phe	Gln	Ser	Lys	Gln	Gln	Pro	Gln	Asp	Asn
			355					360						365	
Phe	Lys	Asn	Asn	Val	Lys	Lys	Ser	Gln	Leu	Pro	Val	Gln	Leu	Asp	Leu

<210> 3731

<211> 1704

<212> DNA

<213> Homo sapiens

<400> 3731

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120
tgtgcagtgc tgcctccagc atcactgttc gtcaatagtc acccaggaat agaccggcct
180
ggcatgctct gcagtttccg gatccctggg gcttggtcct gtgcctgggc cctgaatata
240
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360
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420
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480
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720
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840
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960
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1080
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1140
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1560

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 1704

<210> 3732
 <211> 281
 <212> PRT
 <213> Homo sapiens

<400> 3732
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 Glu Gly Ile Thr Asp Ala Ser Ser Cys Ala Val Leu Leu Pro Ala Ser
 35 40 45
 Leu Phe Val Asn Ser His Pro Gly Ile Asp Arg Pro Gly Met Leu Cys
 50 55 60
 Ser Phe Arg Ile Pro Gly Ala Trp Ser Cys Ala Trp Ser Leu Asn Ile
 65 70 75 80
 Gln Ala Asn Asn Cys Phe Ser Thr Gly Leu Ser Arg Arg Val Leu Leu
 85 90 95
 Thr Asn Val Val Thr Gly His Arg Gln Ser Phe Gly Thr Asn Ser Asp
 100 105 110
 Val Leu Ala Gln Gln Phe Ala Leu Met Ala Pro Leu Leu Phe Asn Gly
 115 120 125
 Cys Arg Ser Gly Glu Ile Phe Ala Ile Asp Leu Arg Cys Gly Asn Gln
 130 135 140
 Gly Lys Gly Trp Lys Ala Thr Arg Leu Phe His Asp Ser Ala Val Thr
 145 150 155 160
 Ser Val Arg Ile Leu Gln Asp Glu Gln Tyr Leu Met Ala Ser Asp Met
 165 170 175
 Ala Gly Lys Ile Lys Leu Trp Asp Leu Arg Thr Thr Lys Cys Val Arg
 180 185 190
 Gln Tyr Glu Gly His Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val
 195 200 205
 His Glu Glu Glu Gly Ile Leu Val Ala Val Gly Gln Asp Cys Tyr Thr
 210 215 220
 Arg Ile Trp Ser Leu His Asp Ala Arg Leu Leu Arg Thr Ile Pro Ser
 225 230 235 240
 Pro Tyr Pro Ala Ser Lys Ala Asp Ile Pro Ser Val Ala Phe Ser Ser
 245 250 255
 Arg Leu Gly Gly Ser Arg Gly Ala Pro Gly Leu Leu Met Ala Val Gly
 260 265 270
 Gln Asp Leu Tyr Cys Tyr Ser Tyr Ser
 275 280

<210> 3733
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 3733

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 120
 tcctcagtgc gggagagga gacgccggg gcangtccat gcctcccgcg gcgtggttgg
 180
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 300
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<210> 3734

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3734

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Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys
		20						25					30		
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr
	35						40				45				
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly
	50				55					60					
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp
65					70				75				80		
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly
			85						90				95		
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala
		100					105					110			
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro
	115						120					125			
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr
	130					135					140				
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp
145					150					155				160	
Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro					
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<210> 3735

<211> 2512

<212> DNA

<213> Homo sapiens

<400> 3735

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180
tctccctcct ccaggacott gtaagtgtct tccttgccag ctctgtgcag gaaacttcca
240
tgctggttct cctctgcca acctctctta atgctctgag agcctctggt gttgacatag
300
aagaggaaac ggagaagaac ctggaaaagg tacagactat cattgaacat ctgcaggaaa
360
agaggcgaga gggcactttg agagtggata cctacactct agtgcagcct gaggcagaag
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480
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540
atctggatac ccacttcggg ctcttgccag aagatttcgt cagaccttta cgggaaggta
600
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660
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720
acaaggtgca gtttgacaca aaaccactga agtttggtcg ctggcagaat tccaaacgat
780
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840
cagtatctaa cagggagcag gaagatctct gccgaggaat tgtccagctc tgcttcaatg
900
agcaaagcca acagctgcta gcagaggtec agccctctga ctctttctc atggtagaga
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1020
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1080
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1140
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1320
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1380
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1440
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1560

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 2160
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<210> 3736

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3736

Thr	Ile	Val	Ala	Leu	Gly	Gln	Gln	Leu	Asp	Arg	Ser	Lys	Pro	Gln	Glu
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Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Lys	Met	Lys	Lys	Arg	Val
			20					25						30	
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
			35				40						45		
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
			50			55				60					
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75				80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
			85					90						95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105						110	
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

115 120 125
 Lys Val Glu Pro Arg Ile Val Ile Val Glu Glu Ala Ala Glu Val Leu
 130 135 140
 Glu Ala His Thr Ile Ala Thr Leu Ser Lys Ala
 145 150 155

<210> 3737

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 3737

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 atccctgctg ccagccagcg catcttcctg caccggcaacc gcattctcgca tgtgccagct
 180
 gccagcttcc gtgcctgccg caacctcacc atcctgtggc tgcactcgaa tgtgctggcc
 240
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 300
 aatgcacagc tccggtctgt ggacctgcc acattccacg gcctggggccg cctacacacg
 360
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 420
 gccctgcagt acctctacct gcaggacaac gcgctgcagg cactgcctga tgacaccttc
 480
 cgcgacctgg gcaacctcac acacctcttc ctgcacggca accgcatctc cagcgtgccc
 540
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 600
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 gccaacaatc tatcagcgct gccactgag gccctggccc cctgcgtgc cctgcagtac
 720
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 780
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 900
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 960
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 1020
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 1046

<210> 3738

<211> 348

<212> PRT

<213> Homo sapiens

<400> 3738

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 Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile
 35 40 45
 Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg
 50 55 60
 Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala
 65 70 75 80
 Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu
 85 90 95
 Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe
 100 105 110
 His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu
 115 120 125
 Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr
 130 135 140
 Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe
 145 150 155 160
 Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile
 165 170 175
 Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg
 180 185 190
 Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe
 195 200 205
 Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu
 210 215 220
 Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr
 225 230 235 240
 Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro
 245 250 255
 Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro
 260 265 270
 Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala
 275 280 285
 Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro
 290 295 300
 Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys
 305 310 315 320
 Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly
 325 330 335
 Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg
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<210> 3739

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 3739

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 120
 agtgaggagg gcctggagat gctcattcaa tgagcgggag gcacctctcc cttcccgtaa
 180
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 240
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 300
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 360
 agaattgttca tctctgcctt ctgctggac aaagggccgg ctgataccac catgctgacg
 420
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 480
 cagcacttta ggatccttca ccacaaaaac aagggttcgag gtgcctcaac tcagagctga
 540
 aagcactgcc agtagctcag actctgataa gagtgaggta gattgtggcc agcgtgccag
 600
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 660
 aactttggat tcccaaccag taaatcttag caagatctga gtttctccag gtatgatatt
 720
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 780
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 1252

<210> 3740

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3740

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Gly	Gln	Trp	Glu	Ser	Ala	Ala	Pro	Pro	Val	Trp	Arg	Pro	Arg	Ala	His
			20					25					30		
Ser	Thr	Glu	Ala	Pro	Gly	His	Pro	Gln	Glu	Asp	Gly	Lys	Gly	Gln	Leu
		35					40					45			
Ala	Gly	Glu	Ser	Pro	Gly	His	Arg	Glu	Pro	Ser	Pro	Gly	Ser	Lys	Gln

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      50              55              60
Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
      115              120              125
Ile Ser Pro Leu Ser Gln Pro Pro Pro Ser Pro
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<210> 3741
 <211> 562
 <212> DNA
 <213> Homo sapiens

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<400> 3741
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120
cggcagatcg gtgcctcctg aatccacccc aaaattccca ctgggaatgt gttcctgaaa
180
gagctgcccc ggcttgagaa agcctctttt cagaccaaac ttcgtattca aagctcaaaa
240
agaactgcac acaattagga cagtcataca agatgctgcc cctaactctg ccacaatctg
300
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360
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420
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540
ctgggctgct ttcattcagc gt
562

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<210> 3742
 <211> 138
 <212> PRT
 <213> Homo sapiens

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<400> 3742
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Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35      40      45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50      55      60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

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115
Arg Thr Val Phe Val Phe
130

120

125

<210> 3745
<211> 345
<212> DNA
<213> Homo sapiens

<400> 3745
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120
ccgtgaacac gtctcccccg gccgtccct ggttccatgc gtgctcgtct tgggcaccac
180
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240
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345

<210> 3746
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3746
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Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr
35 40 45
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile
50 55 60
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys
65 70 75 80
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly
85 90 95
Arg His Val Trp Ala Asp
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<210> 3747
<211> 800
<212> DNA
<213> Homo sapiens

<400> 3747
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120

aagggggcgc gcccgccac tttctgctg agccccgcac cctctctggt ggtctctct
 180
 ggggcgcccc tgccaatccc cgcttcccc tcccgcagat gcagatgcgc ttcgatggac
 240
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 300
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 480
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 780
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<210> 3748

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3748

Met	Gln	Met	Arg	Phe	Asp	Gly	Arg	Leu	Gly	Phe	Pro	Gly	Gly	Phe	Val
1				5					10					15	
Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
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Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
		35					40					45			
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
	50					55					60				
Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Gly	Arg
65					70					75					80
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
				85					90					95	
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
		100						105					110		
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
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Ser	Pro	Ala	Phe	Leu	Val	Glu	Leu	Gly	Ser						
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<210> 3749

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3749

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 120
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 ttggagtcca ctctgtgaca ggggcccgga gccagcgcc ctctcttctt cctcaccgca
 360
 ttccacctgc atccccaca tcacctgaa gatgacttcc tgagccagcc ccagccaca
 420
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 480
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 540
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 648

<210> 3750

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3750

Arg	Ala	Pro	Trp	Glu	Asp	Pro	Ala	Lys	Trp	Val	Met	Asp	Thr	Tyr	Pro
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Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35				40					45				
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50				55					60					
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65				70				75						80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85					90						95	
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100					105							

<210> 3751

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3751

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 120
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 ttgcccctg gcc
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<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

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1				5					10					15	
Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
			20				25						30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
		35				40						45			
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
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<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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 180
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 300
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 360

tcggctacag aatccctccc caccttggag ctcttatctc aggtggacat ggactgcagg
 420
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 480
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<210> 3754

<211> 261

<212> PRT

<213> Homo sapiens

<400> 3754

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Ser	Ala	Thr	Glu	Ser	Leu	Pro	Thr	Leu	Glu	Leu	Leu	Ser	Gln	Val	Asp
			20						25				30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
		35					40					45			
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
	50					55					60				
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
65					70					75				80	
Gly	Lys	Gly	Lys	Leu	His	Leu	Ala	Gly	Pro	Cys	Cys	Pro	Ser	Glu	Met

	85		90		95
Asp Thr Thr Glu Thr Ser Gly Pro Gly Asn His Pro Glu Arg Cys Gly					
100		105		110	
Val Pro Ser Pro Glu Cys Glu Ser Phe Leu Glu His Leu Gln Arg Ala					
115		120		125	
Leu Arg Ser Arg Phe Arg Leu Arg Leu Leu Gly Val Arg Gln Ala Gln					
130		135		140	
Pro Leu Cys Glu Glu Leu Cys Gln Ala Trp Phe Ala Asn Cys Glu Asp					
145		150		155	160
Asp Ile Thr Cys Gly Pro Thr Trp Leu Pro Leu Ser Glu Lys Arg Gly					
165		170		175	
Cys Glu Pro Ser Cys Leu Thr Tyr Gly Gln Thr Phe Ala Asp Gly Thr					
180		185		190	
Asp Leu Cys Arg Ser Ala Leu Gly His Ala Leu Pro Val Ala Ala Pro					
195		200		205	
Gly Ala Arg His Cys Phe Asn Ile Ser Ile Ser Ala Val Pro Arg Pro					
210		215		220	
Arg Pro Gly Arg Arg Gly Arg Glu Ala Pro Ser Arg Arg Ser Arg Ser					
225		230		235	240
Pro Arg Thr Ser Ile Leu Asp Ala Ala Gly Ser Gly Ser Gly Ser Gly					
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<210> 3755

<211> 3149

<212> DNA

<213> Homo sapiens

<400> 3755

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 180
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 720

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<210> 3756

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3756

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			20					25					30		
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro
			35				40					45			
Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
			50			55					60				
Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
65					70				75					80	
Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
			85					90						95	
Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
			100					105					110		
Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
			115				120					125			
Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu	Leu	Gly
			130			135					140				
Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu	Pro	Glu

145		150		155		160									
Gln	His	Asp	Cys	Thr	Phe	Asp	His	Met	Gly	Arg	Gly	Arg	Glu	Glu	Ala
			165						170					175	
Ile	Met	Lys	Met	Val	Lys	Leu	Asp	Arg	Lys	Val	Gly	Arg	Ser	Cys	Gln
			180						185					190	
Arg	Ile	Gly	Glu	Gly	Cys	Ser									
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<210> 3757

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 3757

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<210> 3758

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3758

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 35 40 45
 Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
 50 55 60
 Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
 65 70 75 80
 Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
 85 90 95
 Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
 100 105 110
 Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
 115 120 125
 Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
 130 135 140
 Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala
 145 150 155 160
 Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
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<210> 3759

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3759

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 830

<210> 3760

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3760

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			20					25					30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
		35					40					45			
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
	50					55				60					
Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
65					70					75				80	
Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
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Phe	Val	Leu	Leu												
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<210> 3761

<211> 458

<212> DNA

<213> Homo sapiens

<400> 3761

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<400> 3762
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<212> PRT

<213> Homo sapiens

<400> 3764

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<210> 3765

<211> 2764

<212> DNA

<213> Homo sapiens

<400> 3765

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<211> 464

<212> PRT

<213> Homo sapiens

<400> 3766

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<212> DNA

<213> Homo sapiens

<400> 3767

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 <212> PRT
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<211> 1931

<212> DNA

<213> Homo sapiens

<400> 3769

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<213> Homo sapiens

<400> 3770

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Gly	Gly	Asp	Trp	Ala	Pro	Phe	Pro	His	Asp	Ile	Leu	Pro	Tyr	Gln	Asp
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<210> 3771

<211> 1514

<212> DNA

<213> Homo sapiens

<400> 3771

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<211> 280

<212> PRT

<213> Homo sapiens

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			20					25					30		
Thr	Leu	Gln	His	Trp	Pro	His	Ile	Ile	Arg	Ile	Gly	Asp	Leu	Lys	Pro
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Thr	Ser	Glu	Ile	Pro	Lys	Gln	Val	Lys	Val	Lys	Lys	Leu	Lys	Asn	Leu
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Lys	Thr	Leu	Asp	Ser	Lys	Pro	Gly	Val	Tyr	Thr	Ser	Tyr	Lys	Pro	Tyr
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Leu	Asn	Arg	Asp	Glu	Glu	Ile	Ile	Lys	Gln	Leu	Gln	Lys	Gly	Val	Gln
			85					90						95	
Gln	Lys	Arg	Pro	Ser	Glu	Ala	Gln	Ser	Val	Ile	Leu	Arg	Arg	Tyr	Phe
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Leu	Glu	Leu	Thr	Gln	Ser	Phe	Ile	Ile	Pro	Leu	Glu	Arg	Tyr	Val	Ala
		115				120						125			
Ser	Leu	Met	Pro	Leu	Gln	Lys	Ser	Ile	Ser	Pro	Trp	Lys	Ser	Pro	Pro
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<211> 678

<212> PRT

<213> Homo sapiens

<400> 3774

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Ser	Lys	Val	Glu	Leu	Arg	Leu	Ser	Cys	Arg	His	Leu	Leu	Asp	Arg	Asp
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Pro	Leu	Thr	Lys	Ser	Asp	Pro	Ser	Val	Ala	Leu	Leu	Gln	Gln	Ala	Gln
				85					90					95	
Gly	Gln	Trp	Val	Gln	Val	Gly	Arg	Thr	Glu	Val	Val	Arg	Ser	Ser	Leu
			100					105					110		
His	Pro	Val	Phe	Ser	Lys	Val	Phe	Thr	Val	Asp	Tyr	Tyr	Phe	Glu	Glu
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Val	Gln	Arg	Leu	Arg	Phe	Glu	Val	Tyr	Asp	Thr	His	Gly	Pro	Ser	Gly
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Arg	Tyr	Asp	Asp	Leu	Cys	Leu	Pro	Trp	Ala	Thr	Ala	Gly	Ala	Val	Arg
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			260					265					270		
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Ser	Cys	Asp	Val	His	Arg	Pro	Leu	Lys	Phe	Leu	Val	Trp	Asp	Tyr	Asp
			340					345					350		
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Leu Asp Tyr Ile Met Gly Gly Cys Gln Ile Ser Phe Thr Val Ala Ile
      420      425      430
Asp Phe Thr Ala Ser Asn Gly Asp Pro Arg Ser Ser Gln Ser Leu His
      435      440      445
Tyr Ile Ser Pro Arg Gln Pro Asn His Tyr Leu Gln Ala Leu Arg Ala
      450      455      460
Val Gly Gly Ile Cys Gln Asp Tyr Asp Ser Asp Lys Arg Phe Pro Ala
465      470      475      480
Phe Gly Phe Gly Ala Arg Ile Pro Pro Asn Phe Glu Val Ser His Asp
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Phe Ala Ile Asn Phe Asn Pro Glu Asp Asp Glu Cys Glu Gly Ile Gln
      500      505      510
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<211> 549

<212> DNA

<213> Homo sapiens

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<211> 183

<212> PRT

<213> Homo sapiens

<400> 3776

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			20					25					30		
Pro	Met	Glu	Gln	Asn	Val	Ala	Glu	Leu	Leu	Gln	Phe	Leu	Leu	Val	Lys
		35					40					45			
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<212> DNA

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<211> 1049

<212> PRT

<213> Homo sapiens

<400> 3778

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 Arg Lys Ala Ser Ile Ser Tyr Phe Lys Asn Gln Arg Gly Ile Gln Tyr
 100 105 110
 Ile Asp Leu Ser Ser Asp Ser Glu Asp Val Val Ser Pro Asn Cys Ser
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 Asn Thr Val Gln Glu Lys Thr Phe Asn Lys Asp Thr Val Ile Ile Val
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 Ser Glu Pro Ser Glu Asp Glu Glu Ser Gln Gly Leu Pro Thr Met Ala
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 180 185 190
 Arg Ser Asp Asn Asp Leu Leu Lys Leu Ile Glu Ser Thr Ser Thr Met
 195 200 205
 Asp Gly Ala Ile Ala Ala Ala Leu Leu Met Phe Gly Asp Ala Gly Gly
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 225 230 235 240
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 Gly Glu Glu Ser Asn Glu Ser Ala Glu Ser Ser Ser Asn Trp Glu Lys
 260 265 270
 Gln Glu Ser Ile Val Leu Lys Leu Gln Lys Glu Phe Pro Asn Phe Asp
 275 280 285
 Lys Gln Glu Leu Arg Glu Val Leu Lys Glu His Glu Trp Met Tyr Thr
 290 295 300
 Glu Ala Leu Glu Ser Leu Lys Val Phe Ala Glu Asp Gln Asp Met Gln
 305 310 315 320
 Tyr Ala Ser Gln Ser Glu Val Pro Asn Gly Lys Glu Val Ser Ser Arg
 325 330 335
 Ser Gln Asn Tyr Pro Lys Asn Ala Thr Lys Thr Lys Leu Lys Gln Lys
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 Phe Ser Met Lys Ala Gln Asn Gly Phe Asn Lys Lys Arg Lys Lys Asn
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 Val Phe Asn Pro Lys Arg Val Val Glu Asp Ser Glu Tyr Asp Ser Gly

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Val Met Glu Asp Gly Tyr Lys Gly Lys Ile Leu His Phe Leu Gln Asp				
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Ala Ser Ile Gly Glu Leu Thr Leu Ile Pro Gln Cys Ser Gln Lys Lys				
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Phe Thr Lys Met Ser Lys Thr Asn Gly Leu Ser Glu Asp Leu Ile Trp				
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Tyr Gln Glu Gly Asn Asn Gly Pro His Leu Ile Val Val Pro Ala Ser				
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Thr Ile Asp Asn Trp Leu Arg Glu Val Asn Leu Trp Cys Pro Thr Leu				
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Phe Asn Ile His Ser Arg Tyr Glu Asp Tyr Asn Val Ile Val Thr Thr				
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Tyr Asn Cys Ala Ile Ser Ser Ser Asp Asp Arg Ser Leu Phe Arg Arg				
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Leu Lys Leu Asn Tyr Ala Ile Phe Asp Glu Gly His Met Leu Lys Asn				
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Met Gly Ser Ile Arg Tyr Gln His Leu Met Thr Ile Asn Ala Asn Asn				
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Arg Leu Leu Leu Thr Gly Thr Pro Val Gln Asn Asn Leu Leu Glu Leu				
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Met Ser Leu Leu Asn Phe Val Met Pro His Met Phe Ser Ser Ser Thr				
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Gln Ser Ile Tyr Glu Lys Glu Arg Ile Ala His Ala Lys Gln Ile Ile				
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Lys Pro Phe Ile Leu Arg Arg Val Lys Glu Glu Val Leu Lys Gln Leu				
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Pro Pro Lys Lys Asp Arg Ile Glu Leu Cys Ala Met Ser Glu Arg Gln				
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Glu Gln Leu Tyr Leu Gly Leu Phe Asn Arg Leu Lys Lys Ser Ile Asn				
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<210> 3779

<211> 1853

<212> DNA

<213> Homo sapiens

<400> 3779

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<210> 3780

<211> 530

<212> PRT

<213> Homo sapiens

<400> 3780

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Lys Arg Gln Lys Ile Gln Arg Glu Leu Met Lys Leu Glu Gln Glu Asn			
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Met Glu Lys Arg Glu Glu Ile Ile Ile Lys Lys Glu Val Ser Pro Glu			
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Val Val Arg Ser Lys Leu Ser Pro Ser Pro Ser Leu Arg Lys Ser Ser			
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Lys Ser Pro Lys Arg Lys Ser Ser Pro Lys Ser Ser Ser Ala Ser Lys			
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Lys Asp Arg Lys Thr Ser Ala Val Ser Ser Pro Leu Leu Asp Gln Gln			
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Ser Pro Pro Pro Pro Ile Pro Glu Asp Ile Ala Leu Gly Lys Lys Tyr			
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Gly Lys Asp Arg Gly Arg Asp Phe Glu Arg Gln Arg Glu Lys Arg Asp			
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Lys Pro Arg Ser Thr Ser Pro Ala Gly Gln His His Ser Pro Ile Ser			
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Ser Arg His His Ser Ser Ser Ser Gln Ser Gly Ser Ser Ile Gln Arg			
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His Ser Pro Ser Pro Arg Arg Lys Arg Thr Pro Ser Pro Ser Tyr Gln			
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Arg Thr Leu Thr Pro Pro Leu Arg Arg Ser Ala Ser Pro Tyr Pro Ser			
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Ser Pro Met Arg Glu Lys Gly Arg His Asp His Glu Arg Thr Ser Gln			
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465		470		475
Ser Tyr Pro Glu Arg Asp Arg Tyr Pro Glu Arg Asp Asn Arg Asp Gln				
	485		490	495
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 3782
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 Asp Leu Gln Asp Ser Ser Glu Leu His Pro Glu Phe Ala Lys Cys His
 35 40 45
 Val Pro Trp Thr Pro Arg Phe Ala Tyr Gly Val Phe Tyr Ala Asp Pro
 50 55 60
 Cys Thr Gly Gly Asp Ser Tyr His Pro His Glu Gln Ser Ser Pro Pro
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<210> 3783
 <211> 4137
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<211> 804

<212> PRT

<213> Homo sapiens

<400> 3784

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2931

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Trp Tyr Gly Val Asp Val Thr Ala Arg Asp Ala His Gly Asn Thr Ala		
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Leu Ala Tyr Ala Arg Gln Ala Ser Ser Gln Glu Cys Ile Asp Val Leu		
755	760	765
Leu Gln Tyr Gly Cys Pro Asp Glu Arg Phe Val Leu Met Ala Thr Pro		
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<210> 3785

<211> 1901

<212> DNA

<213> Homo sapiens

<400> 3785

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<211> 168

<212> PRT

<213> Homo sapiens

<400> 3786

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<212> DNA

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<213> Homo sapiens

<400> 3788

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			20					25					30		
Pro	Trp	Gly	Ala	Lys	Cys	Ser	Trp	Arg	Gln	Val	Ala	Lys	Gly	Glu	His
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<210> 3790
 <211> 1092
 <212> PRT
 <213> Homo sapiens

<400> 3790

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Leu Gln Val Leu Lys Ala Gln Ser Glu Asp Pro Leu Pro Glu Leu His
 35          40          45
Glu Asp Leu His Asn Glu Lys Glu Leu Ile Lys Glu Leu Glu Gln Ser
 50          55          60
Leu Ala Ser Trp Thr Gln Asn Leu Lys Glu Leu Gln Thr Met Lys Ala
 65          70          75          80
Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu
 85          90          95
Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val
100          105          110
Ala Ile Arg Lys Gln Glu Ile Glu Asp Arg Leu Asn Thr Trp Val Val
115          120          125
Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu
130          135          140
Asn Lys Val Leu Gln Thr Val Asp Ile Ser Ile Glu Glu Met Ile Glu
145          150          155          160
Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn
165          170          175
Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn
180          185          190
Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp
195          200          205
Arg Trp Gln His Leu Phe Asp Val Ile Gly Ser Arg Val Lys Lys Leu
210          215          220
Lys Glu Thr Phe Ala Phe Ile Gln Gln Leu Asp Lys Asn Met Ser Asn
225          230          235          240
Leu Arg Thr Trp Leu Ala Arg Ile Glu Ser Glu Leu Ser Lys Pro Val
245          250          255
Val Tyr Asp Val Cys Asp Asp Gln Glu Ile Gln Lys Arg Leu Ala Glu
260          265          270
Gln Gln Asp Leu Gln Arg Asp Ile Glu Gln His Ser Ala Gly Val Glu
275          280          285
Ser Val Phe Asn Ile Cys Asp Val Leu Leu His Asp Ser Asp Ala Cys
290          295          300
Ala Asn Glu Thr Glu Cys Asp Ser Ile Gln Gln Thr Thr Arg Ser Leu
305          310          315          320
Asp Arg Arg Trp Arg Asn Ile Cys Ala Met Ser Met Glu Arg Arg Met
325          330          335
Lys Ile Glu Glu Thr Trp Arg Leu Trp Gln Lys Phe Leu Asp Asp Tyr
340          345          350
Ser Arg Phe Glu Asp Trp Leu Lys Ser Ala Glu Arg Thr Ala Ala Cys
355          360          365
Pro Asn Ser Ser Glu Val Leu Tyr Thr Ser Ala Lys Glu Glu Leu Lys

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370	375	380
Arg Phe Glu Ala Phe Gln Arg Gln Ile His Glu Arg Leu Thr Gln Leu		
385	390	395
Glu Leu Ile Asn Lys Gln Tyr Arg Arg Leu Ala Arg Glu Asn Arg Thr		400
	405	410
Asp Thr Ala Ser Arg Leu Lys Gln Met Val His Glu Gly Asn Gln Arg		415
	420	425
Trp Asp Asn Leu Gln Arg Arg Val Thr Ala Val Leu Arg Arg Leu Arg		430
	435	440
His Phe Thr Asn Gln Arg Glu Glu Phe Glu Gly Thr Arg Glu Ser Ile		445
	450	455
Leu Val Trp Leu Thr Glu Met Asp Leu Gln Leu Thr Asn Val Glu His		460
465	470	475
Phe Ser Glu Ser Asp Ala Asp Asp Lys Met Arg Gln Leu Asn Gly Phe		480
	485	490
Gln Gln Glu Ile Thr Leu Asn Thr Asn Lys Ile Asp Gln Leu Ile Val		495
	500	505
Phe Gly Glu Gln Leu Ile Gln Lys Ser Glu Pro Leu Asp Ala Val Leu		510
	515	520
Ile Glu Asp Glu Leu Glu Glu Leu His Arg Tyr Cys Gln Glu Val Phe		525
530	535	540
Gly Arg Val Ser Arg Phe His Arg Arg Leu Thr Ser Cys Thr Pro Gly		545
	550	555
Leu Glu Asp Glu Lys Glu Ala Ser Glu Asn Glu Thr Asp Met Glu Asp		560
	565	570
Pro Arg Glu Ile Gln Thr Asp Ser Trp Arg Lys Arg Gly Glu Ser Glu		575
	580	585
Glu Pro Ser Ser Pro Gln Ser Leu Cys His Leu Val Ala Pro Gly His		590
	595	600
Glu Arg Ser Gly Cys Glu Thr Pro Val Ser Val Asp Ser Ile Pro Leu		605
610	615	620
Glu Trp Asp His Thr Gly Asp Val Gly Gly Ser Ser Ser His Glu Glu		625
	630	635
Asp Glu Glu Gly Pro Tyr Tyr Ser Ala Leu Ser Gly Lys Ser Ile Ser		640
	645	650
Asp Gly His Ser Trp His Val Pro Asp Ser Pro Ser Cys Pro Glu His		655
	660	665
His Tyr Lys Gln Met Glu Gly Asp Arg Asn Val Pro Pro Val Pro Pro		670
	675	680
Ala Ser Ser Thr Pro Tyr Lys Pro Pro Tyr Gly Lys Leu Leu Leu Pro		685
	690	695
Pro Gly Thr Asp Gly Gly Lys Glu Gly Pro Arg Val Leu Asn Gly Asn		700
705	710	715
Pro Gln Gln Glu Asp Gly Gly Leu Ala Gly Ile Thr Glu Gln Gln Ser		720
	725	730
Gly Ala Phe Asp Arg Trp Glu Met Ile Gln Ala Gln Glu Leu His Asn		735
	740	745
Lys Leu Lys Ile Lys Gln Asn Leu Gln Gln Leu Asn Ser Asp Ile Ser		750
	755	760
Ala Ile Thr Thr Trp Leu Lys Lys Thr Glu Ala Glu Leu Glu Met Leu		765
770	775	780
Lys Met Ala Lys Pro Pro Ser Asp Ile Gln Glu Ile Glu Leu Arg Val		785
	790	795
Lys Arg Leu Gln Glu Ile Leu Lys Ala Phe Asp Thr Tyr Lys Ala Leu		800

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<210> 3791
<211> 1011
<212> DNA
<213> Homo sapiens
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 420
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 540
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 600
 ccatatacct tcaggggttt cgggttccat aagtttttga tgcaagtaaa ggctgctttc
 660
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 720
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 780
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 840
 aatccctcag aaacaggaac ttacctccc atggacagag ccagttgaa agtttcaaaa
 900
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<210> 3792

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3792

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Phe	Leu	Cys	Ser	Gly	Gly	His	Asn	Ala	Leu	Phe	Glu	Thr	Phe	Asn	Trp
			20					25					30		
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His
		35				40						45			
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met
50					55					60					
Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His
65				70					75					80	
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe
			85					90					95		
Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys
		100					105					110			
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Gly	Arg
	115				120						125				
Met	Ala	Glu	Ser	Met	Leu	Ala	Ile	Leu	Cys	His	Ile	Leu	Arg	Gly	Glu
130					135						140				
Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly
145				150					155					160	
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln
			165					170					175		
Val	Asn	Gln	Gln	Gln	Leu	Gln	Gln	Leu	Met	Asp	Met	Gly	Phe	Thr	Arg

				180				185				190			
Glu	His	Ala	Met	Glu	Ala	Leu	Leu	Asn	Thr	Ser	Thr	Met	Glu	Gln	Ala
195				200				205							
Thr	Glu	Tyr	Leu	Leu	Thr	His	Pro	Pro	Pro	Ile	Met	Gly	Gly	Val	Val
210				215				220							
Arg	Asp	Leu	Ser	Met	Ser	Glu	Glu	Asp	Gln	Met	Met	Arg	Ala	Ile	Ala
225				230				235				240			
Met	Ser	Leu	Gly	Gln	Asp	Ile	Pro	Met	Asp	Gln	Arg	Ala	Glu	Ser	Pro
245				250				255							
Glu	Glu	Val	Ala	Cys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Ala	Arg	Glu
260				265				270							
Lys	Gln	Glu	Glu	Glu	Ala	Lys	Cys	Leu	Lys	Lys	Val	Gln	Gly	Cys	
275				280				285							

<210> 3793

<211> 360

<212> DNA

<213> Homo sapiens

<400> 3793

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120
tactttgtgc cgggtaggaa caacagtttc tttttttctt ggagacagtg tttcactctt
180
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240
ctcaagagat tctcctgcct cagcctccca agtagctggg attacaggca tgcattacca
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360

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<210> 3794

<211> 96

<212> PRT

<213> Homo sapiens

<400> 3794

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Cys	Val	Phe	Ile	Phe	Gln	Ile	Thr	Gly	Arg	Phe	Leu	Gly	Leu	Cys	Tyr
		20						25					30		
Phe	Val	Pro	Gly	Arg	Asn	Asn	Ser	Phe	Phe	Phe	Ser	Trp	Arg	Gln	Cys
		35					40					45			
Phe	Thr	Leu	Val	Ala	Gln	Ala	Gly	Gly	Gln	Trp	Arg	Asp	Leu	Ser	Ser
	50					55					60				
Leu	Gln	Pro	Pro	Pro	Phe	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu
65					70					75					80
Pro	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Ser	Pro	Cys	Thr	Met	Pro	Asp
				85					90					95	

<210> 3795

<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3795

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120
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180
cctcgacagg gctttcccat catctttcac ggcgtaatgg gcaaagatga gcgtgaaggg
240
aacagcccat ccttcttcaa ccctgaagag gctgccacag tgacttcta cctgaagctg
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420
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480
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540
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660
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720
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780
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<210> 3796

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3796

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 35 40 45
 Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
 50 55 60
 Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
 65 70 75 80
 Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
 85 90 95
 Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
 100 105 110
 Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
 115 120 125
 Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
 130 135 140
 Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
 145 150 155 160
 Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
 165 170 175
 Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
 180 185 190
 Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
 195 200 205
 Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
 210 215 220
 Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
 225 230 235 240
 Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
 245 250 255
 Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
 260 265 270
 Pro Gln Glu Arg Glu Gly Glu Gly Leu Ser Leu Gln Val Glu Pro
 275 280 285
 Glu Trp Arg Asn Glu Leu
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<210> 3797

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 3797

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 180

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 1970

<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

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Val	Ile	Leu	Phe	Gly	Val	Phe	Val	Arg	Tyr	Asp	Phe	Glu	Ala	Asp	Ala
			20					25					30		
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
		35					40					45			
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
	50					55					60				
Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
65					70					75					80
Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
				85					90					95	
Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
			100					105					110		
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
		115					120					125			
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
	130					135					140				
Leu	Leu	Ile	Met	Thr	Phe	Gln	Val	Thr	Leu	Phe	Ala	Val	Asn	Glu	
145					150					155				160	
Phe	Ile	Leu	Leu	Asn	Leu	Leu	Lys	Val	Lys	Asp	Ala	Gly	Gly	Ser	Met
				165					170					175	
Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
			180					185					190		
Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
	195					200						205			
Tyr	Gln	Ser	Asp	Leu	Phe	Ala	Met	Ile	Gly	Thr	Leu	Phe	Leu	Trp	Met
	210					215						220			
Tyr	Trp	Pro	Ser	Phe	Asn	Ser	Ala	Ile	Ser	Tyr	His	Gly	Asp	Ser	Gln
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Thr	Ser	Val	Ala	Ile	Ser	Ser	Ala	Leu	His	Lys	Lys	Gly	Lys	Leu	Asp
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Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
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 Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
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 405 410 415
 Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
 420 425 430
 Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
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 <212> DNA
 <213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 3802

<211> 476

<212> PRT

<213> Homo sapiens

<400> 3802

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Pro	Glu	Ile	Gln	Lys	Pro	Glu	Arg	Lys	Ile	Gln	Phe	Lys	Glu	Lys	Val
			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
		35					40					45			
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
	50					55					60				
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
65				70					75					80	
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85				90							95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100				105						110		
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<210> 3803
<211> 345
<212> DNA
<213> Homo sapiens
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<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

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Met	Ser	Ile	Leu	Gly	Lys	Gly	Ser	Met	Arg	Asp	Lys	Ala	Lys	Glu
			20					25				30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp
			35				40					45		
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr
			50			55					60			
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro
					70					75				80
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr
				85					90					95
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Gly
			100					105					110	
Ile	Arg	Ile												
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<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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<210> 3806

<211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3806

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Pro Leu Arg Phe Trp Leu Val Ile Asn Gln Glu Gly Asn Met Val Thr
 35           40           45
Ala Arg Gln Glu Pro Arg Leu Val Leu Ile Ser Leu Thr Cys Asp Gly
 50           55           60
Asp Thr Leu Thr Leu Ser Ala Ala Tyr Thr Lys Asp Leu Leu Leu Pro
 65           70           75           80
Ile Lys Thr Pro Thr Thr Asn Ala Val His Lys Cys Arg Val His Gly
 85           90           95
Leu Glu Ile Glu Gly Arg Asp Cys Gly Glu Ala Ala Ala Gln Trp Ile
 100          105          110
Thr Ser Phe Leu Lys Ser Gln Pro Tyr Arg Leu Val His Phe Glu Pro
 115          120          125
His Met Arg Pro Arg Arg Pro His Gln Ile Ala Asp Leu Phe Arg Pro
 130          135          140
Lys Asp Gln Ile Ala Tyr Ser Asp Thr Ser Pro Phe Leu Ile Leu Ser
 145          150          155          160
Glu Ala Ser Leu Ala Asp Leu Asn Ser Arg Leu Glu Lys Lys Val Lys
 165          170          175
Ala Thr Asn Phe Arg Pro Asn Ile Val Ile Ser Gly Cys Asp Val Tyr
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Ala Glu Asp Ser Trp Asp Glu Leu Leu Ile Gly Asp Val Glu Leu Lys
 195          200          205
Arg Val Met Ala Cys Ser Arg Cys Ile Leu Thr Thr Val Asp Pro Asp
 210          215          220
Thr Gly Val Met Ser Arg Lys Glu Pro Leu Glu Thr Leu Lys Ser Tyr
 225          230          235          240
Arg Gln Cys Asp Pro Ser Glu Arg Lys Leu Tyr Gly Lys Ser Pro Leu
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<210> 3807
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 3807

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<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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		20						25				30			
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
	35					40					45				
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
	50					55				60					
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
65					70				75					80	
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<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

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			20					25					30		
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr
			35				40					45			
Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
			50			55					60				
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
			65			70				75				80	
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Arg

<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

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Pro	Val	Leu	Lys	Ala	Gln	Asn	Cys	Arg	Pro	Ser	Gly	Arg	Pro	Val	Leu
			20					25					30		
Pro	Tyr	Gln	Arg	Thr	Pro	Arg	Gln	Ile	Ser	Gly	Gln	Gln	Gly	His	Leu
		35					40					45			
Thr	Trp	Gly	Ala	Cys	Trp	Gln	His	Cys	Leu	Asp	Ser	Arg	Ala	Ser	Leu
	50					55					60				
Gly	Pro	Pro	Pro	Asn	Pro	Ala	Arg	Glu	Arg	Leu	Lys	Ala	Cys	Pro	Pro
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Cys	Trp	Ala	Trp	Val	Gly	Arg	Ser	Gly	Thr	Gly	Pro	Ser	Arg		
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<210> 3813

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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<210> 3814

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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	20							25					30		
Val	Gly	Leu	Trp	Ile	Leu	Asn	Met	Asp	Ser	Leu	Ser	Ala	Arg	Arg	Thr
	35					40						45			
Leu	His	Thr	Phe	Asp	Leu	Leu	Gly	Phe	Gly	Arg	Ser	Ser	Arg	Pro	Ala
	50				55					60					
Phe	Pro	Arg	Asp	Pro	Glu	Gly	Ala	Glu	Asp	Glu	Phe	Val	Thr	Ser	Ile
65				70				75						80	
Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Leu	Gly
		85						90					95		
His	Ser	Leu	Gly	Gly	Phe	Leu	Ala	Thr	Ser	Tyr	Ser	Ile	Lys	Tyr	Pro
	100							105					110		
Asp	Arg	Val	Lys	His	Leu	Ile	Leu	Val	Asp	Pro	Trp	Gly	Phe	Pro	Leu
	115					120					125				
Arg	Pro	Thr	Asn	Pro	Ser	Glu	Ile	Arg	Ala	Pro	Pro	Ala	Trp	Val	Lys
	130					135					140				
Ala	Val	Ala	Ser	Val	Leu	Gly	Arg	Ser	Asn	Pro	Leu	Ala	Val	Leu	Arg
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<400> 3815
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<210> 3816

<211> 707

<212> PRT

<213> Homo sapiens

<400> 3816

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Lys	Tyr	Asp	Pro	Thr	Phe	Lys	Gly	Pro	Ile	Tyr	Asn	Arg	Gly	Cys	Thr
			20					25					30		
Asp	Ile	Ile	Cys	Cys	Val	Phe	Leu	Leu	Leu	Ala	Ile	Val	Gly	Tyr	Val
		35					40					45			
Ala	Val	Gly	Ile	Ile	Ala	Trp	Thr	His	Gly	Asp	Pro	Arg	Lys	Val	Ile

2962

485 490 495
 Arg Ala Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile
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 Leu Ala Ile Val Gln Ile Ile Arg Val Ile Leu Glu Tyr Leu Asp Gln
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 Arg Leu Lys Ala Ala Glu Asn Lys Phe Ala Lys Cys Leu Met Thr Cys
 530 535 540
 Leu Lys Cys Cys Phe Trp Cys Leu Glu Lys Phe Ile Lys Phe Leu Asn
 545 550 555 560
 Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Thr Asn Phe Cys Thr
 565 570 575
 Ser Ala Arg Asn Ala Phe Phe Leu Leu Met Arg Asn Ile Ile Arg Val
 580 585 590
 Ala Val Leu Asp Lys Val Thr Asp Phe Leu Phe Leu Leu Gly Lys Leu
 595 600 605
 Leu Ile Val Gly Ser Val Gly Ile Leu Ala Phe Phe Phe Phe Thr His
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 Arg Ile Arg Ile Val Gln Asp Thr Ala Pro Pro Leu Asn Tyr Tyr Trp
 625 630 635 640
 Val Pro Ile Leu Thr Val Ile Val Gly Ser Tyr Leu Ile Ala His Gly
 645 650 655
 Phe Phe Ser Val Tyr Gly Met Cys Val Asp Thr Leu Phe Leu Cys Phe
 660 665 670
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<210> 3817
 <211> 419
 <212> DNA
 <213> Homo sapiens

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<210> 3818
 <211> 139
 <212> PRT

<213> Homo sapiens

<400> 3818

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 20 25 30
 Arg Glu Ile Asn Pro Leu Leu Phe Ser Tyr Val Glu Glu Leu Val Glu
 35 40 45
 Ile Arg Lys Leu Arg Gln Asp Ile Leu Leu Met Lys Pro Tyr Phe Ile
 50 55 60
 Thr Cys Arg Glu Ala Met Glu Ala Arg Leu Leu Gln Asp Leu Leu
 65 70 75 80
 Asp Val His Ala Gly Arg Leu Gly Cys Ser Leu Thr Glu Ile His Thr
 85 90 95
 Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala Lys
 100 105 110
 Gly Phe Val Cys Glu Leu Cys Arg Glu Gly Asp Val Leu Phe Pro Phe
 115 120 125
 Asp Ser His Thr Ser Val Cys Ala Asp Cys Phe
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<210> 3819

<211> 1731

<212> DNA

<213> Homo sapiens

<400> 3819

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<210> 3820

<211> 535

<212> PRT

<213> Homo sapiens

<400> 3820

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		20					25				30				
Tyr	Phe	Phe	Thr	Asn	Cys	Ser	Ile	Ser	Phe	Thr	Ser	Leu	Gly	Asp	Asn
	35					40					45				
Ser	Trp	His	Phe	Glu	Gly	Ser	Trp	Ser	Cys	Ala	Gly	Ser	Cys	Phe	Ala
	50				55						60				
Ser	Cys	Phe	Phe	Arg	Tyr	Cys	Ala	Pro	Ser	Glu	Pro	Ala	Thr	Gly	Arg
65				70				75					80		
Arg	Lys	Phe	Asp	Gly	Ala	Gly	Arg	Val	Ala	Val	Glu	Arg	Arg	Arg	Gly
		85				90					95				
Ser	Ser	Ala	Gly	Phe	Pro	Cys	Ser	Gln	Arg	Ser	Arg	Arg	Pro	Ala	Glu
		100				105					110				
Pro	Gly	Arg	Gly	Ile	Thr	Asp	Arg	Arg	Arg	Arg	Gly	Pro	Ile	Gly	Arg

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Gly Gln Glu Glu His Asp Val Leu Leu Ser Asn Glu Glu Asp Arg Lys		
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Leu Lys Ser Asp Gly Ile Pro Met Tyr Lys Arg Asn Val Met Ile Leu		
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Thr Asn Pro Val Ala Ala Lys Lys Asn Val Ser Ile Asn Thr Val Thr		
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Met Gln Met Leu Pro Lys Glu Lys Gln Pro Val Ala Gly Ser Glu Gly		
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275	280	285
Gln Asp Pro Ser Lys Cys His Glu Leu Ser Pro Arg Glu Val Lys Glu		
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305	310	315
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325	330	335
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355	360	365
Cys Lys Leu Ser Met Lys Glu Gly Asp Pro Ala Ile Tyr Ala Glu Arg		
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385	390	395
Cys His Glu Leu Leu Val Asp Met Ile Tyr Phe Trp Lys Asn Glu Lys		
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420	425	430
Gly Cys Asp Glu Leu Ile Phe Ser Asn Glu Tyr Thr Gln Ala Glu Asn		
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Gln Asn Trp His Leu Lys His Phe Cys Cys Phe Asp Cys Asp Ser Ile		
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Leu Ala Gly Glu Ile Tyr Val Met Val Asn Asp Lys Pro Val Cys Lys		
465	470	475
Pro Cys Tyr Val Lys Asn His Ala Val Val Arg Ser Val Leu Arg Ile		
485	490	495
Trp Leu Pro Gln Pro Ala Leu Gly Leu Glu Phe Met Leu Phe Leu Lys		
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<210> 3821

<211> 5212

<212> DNA

<213> Homo sapiens

<400> 3821

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Arg Leu Ala Arg Ala Ala Ala Ala Arg Lys Pro Arg Ser Pro Pro Arg				
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Ala Leu Val Leu Pro His Ile Ala Ser His His Gln Val Asp Pro Thr				
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Glu Pro Val Gly Gly Ala Arg Met Arg Leu Thr Gln Glu Glu Lys Glu				
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Arg Arg Arg Lys Leu Asn Leu Cys Leu Tyr Cys Gly Thr Gly Gly His				
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<212> DNA

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<400> 3825

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<213> Homo sapiens

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<211> 1245

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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 Phe Lys Gly Phe Arg Gly Gly Leu Asp Val Thr His Gly Gln Thr Gly
 20 25 30
 Val Glu Ser Val Tyr Thr Thr Phe Arg Asp Arg Glu Ile Met Phe His

35	40	45
Val Ser Thr Lys Leu Pro Phe Thr Asp Gly Asp Ala Gln Gln Leu Gln		
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Arg Lys Arg His Ile Gly Asn Asp Ile Val Ala Ile Ile Phe Gln Glu		
65	70	75
Glu Asn Thr Pro Phe Val Pro Asp Met Ile Ala Ser Asn Phe Leu His		
85	90	95
Ala Tyr Ile Val Val Gln Val Glu Thr Pro Gly Thr Glu Thr Pro Ser		
100	105	110
Tyr Lys Val Ser Val Thr Ala Arg Glu Asp Val Pro Thr Phe Gly Pro		
115	120	125
Pro Leu Pro Ser Pro Pro Val Phe Gln Lys Gly Pro Glu Phe Arg Glu		
130	135	140
Phe Leu Leu Thr Lys Leu Thr Asn Ala Glu Asn Ala Cys Cys Lys Ser		
145	150	155
Asp Lys Phe Ala Lys Leu Glu Asp Arg Thr Arg Ala Ala Leu Leu Asp		
165	170	175
Asn Leu His Asp Glu Leu His Ala His Thr Gln Ala Met Leu Gly Leu		
180	185	190
Gly Pro Glu Glu Asp Lys Phe Glu Asn Gly Gly His Gly Gly Phe Leu		
195	200	205
Glu Ser Phe Lys Arg Ala Ile Arg Val Arg Ser His Ser Met Glu Thr		
210	215	220
Met Val Gly Gly Gln Lys Lys Ser His Ser Gly Gly Ile Pro Gly Ser		
225	230	235
Leu Ser Gly Gly Ile Ser His Asn Ser Met Glu Val Thr Lys Thr Thr		
245	250	255
Phe Ser Pro Pro Val Val Ala Ala Thr Val Lys Asn Gln Ser Arg Ser		
260	265	270
Pro Ile Lys Arg Arg Ser Gly Leu Phe Pro Arg Leu His Thr Gly Ser		
275	280	285
Glu Gly Gln Gly Asp Ser Arg Ala Arg Cys Asp Ser Thr Ser Ser Thr		
290	295	300
Pro Lys Thr Pro Asp Gly Gly His Ser Ser Gln Glu Ile Lys Ser Glu		
305	310	315
Thr Ser Ser Asn Pro Ser Ser Pro Glu Ile Cys Pro Asn Lys Glu Lys		
325	330	335
Pro Phe Met Lys Leu Lys Glu Asn Gly Arg Ala Ile Ser Arg Ser Ser		
340	345	350
Ser Ser Thr Ser Ser Val Ser Ser Thr Ala Gly Glu Gly Glu Ala Met		
355	360	365
Glu Glu Gly Asp Ser Gly Gly Ser Gln Pro Ser Thr Thr Ser Pro Phe		
370	375	380
Lys Gln Glu Val Phe Val Tyr Ser Pro Ser Pro Ser Ser Glu Ser Pro		
385	390	395
Ser Leu Gly Ala Ala Ala Thr Pro Ile Ile Met Ser Arg Ser Pro Thr		
405	410	415
Asp Ala Lys Ser Arg Asn Ser Pro Arg Ser Asn Leu Lys Phe Arg Phe		
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<210> 3831

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3831

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600
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726

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<210> 3832

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3832

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20      25      30
Leu Ser Ser Ala Leu Ala Cys Tyr Gly Leu Ser Phe Leu Gln Leu His
35      40      45
Ser Thr Asn Ser His Ile Asp Arg Ile Asn Phe Ser Val Lys Met Val
50      55      60
Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
65      70      75      80
Ile Lys Asn Met Glu Gln Lys Tyr Cys Asn Leu Cys Ile Gln Leu Phe
85      90      95
Ile Ser Phe Leu Leu Leu Thr Val Gln Thr Phe
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<210> 3833

<211> 1764

<212> DNA

<213> Homo sapiens

<400> 3833

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660
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720
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780
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960
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1020
caggctttaa gggagaggtc ttgcgccagg actttaccgc cagtgaattc caattctgtg
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1320
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1380
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1500

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 1620
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 1764

<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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			20				25						30		
Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp
		35					40					45			
Leu	Leu	Leu	Leu	Ser	Ser	Glu	Ala	Arg	Pro	Val	Leu	Phe	Glu	Gly	Pro
		50				55					60				
Ala	Ser	Ser	Gly	Ala	Gly	Ala	Glu	Ser	Phe	Glu	Gln	Gly	Arg	Asp	Thr
65					70					75				80	
Ile	Ile	Ala	Arg	Thr	Lys	Gly	Leu	Ser	Ile	Leu	Thr	His	Asp	Val	Gln
			85						90					95	
Ser	Gln	Leu	Asn	Met	Gly	Arg	Phe	Gly	Glu	Ala	Gly	Asp	Ser	Leu	Val
			100					105					110		
Glu	Leu	Gly	Asp	Leu	Val	Val	Ser	Leu	Thr	Glu	Cys	Ser	Ala	His	Ala
		115					120					125			
Ala	Tyr	Leu	Ala	Ala	Val	Ala	Thr	Pro	Gly	Ala	Gln	Pro	Ala	Gln	Pro
	130					135					140				
Gly	Leu	Val	Asp	Arg	Tyr	Arg	Val	Thr	Arg	Cys	Arg	His	Glu	Val	Glu
145					150					155				160	
Gln	Gly	Cys	Ala	Val	Leu	Arg	Ala	Thr	Pro	Leu	Ala	Asp	Met	Thr	Pro
			165						170					175	
Gln	Leu	Leu	Leu	Glu	Val	Ser	Gln	Gly	Leu	Ser	Arg	Asn	Leu	Lys	Phe
		180						185					190		
Leu	Thr	Asp	Ala	Cys	Ala	Leu	Ala	Ser	Asp	Lys	Ser	Arg	Asp	Arg	Phe
		195					200					205			
Ser	Arg	Glu	Gln	Phe	Lys	Leu	Gly	Val	Lys	Cys	Met	Ser	Thr	Ser	Ala
	210					215					220				
Ser	Ala	Leu	Leu	Ala	Cys	Val	Arg	Glu	Val	Lys	Val	Ala	Pro	Ser	Glu
225					230					235				240	
Leu	Ala	Arg	Ser	Arg	Cys	Ala	Leu	Phe	Ser	Gly	Pro	Leu	Val	Gln	Ala
			245						250					255	
Val	Ser	Ala	Leu	Val	Gly	Phe	Ala	Thr	Glu	Pro	Gln	Phe	Leu	Gly	Arg
		260						265					270		
Ala	Ala	Ala	Val	Ser	Ala	Glu	Gly	Lys	Ala	Val	Gln	Thr	Ala	Ile	Leu
		275					280						285		
Gly	Gly	Ala	Met	Ser	Val	Val	Ser	Ala	Cys	Val	Leu	Leu	Thr	Gln	Cys

290		295		300
Leu Arg Asp Leu Ala Gln His Pro Asp Gly Gly Ala Lys Met Ser Asp				
305		310		315
His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys				320
	325		330	335
Thr Leu Leu Ser Gln Ala Leu Arg Glu Arg Ser Ser Pro Arg Thr Leu				
	340		345	350
Pro Pro Val Asn Ser Asn Ser Val Asn				
355		360		

<210> 3835

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 3835

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 gccatggagc acggagggtc ctacgctcgg gcgggggggca gctctcgggg ctgctggtat
 180
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 240
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 300
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 360
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 420
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 480
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 600
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 660
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<210> 3836

<211> 479

<212> PRT

<213> Homo sapiens

<400> 3836

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 Gly Gly Ile Glu Gln Met Gly Leu Ala Met Glu His Gly Gly Ser Tyr

2990

465

470

475

<210> 3837

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 3837

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 2084

<210> 3838

<211> 468

<212> PRT

<213> Homo sapiens

<400> 3838

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			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
	35					40						45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
	50					55				60					
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
65					70					75				80	
Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
				85				90					95		
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
			100					105					110		
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
		115					120					125			
Arg	Phe	Asn	Pro	Ser	Gly	Tyr	Leu	Leu	Leu	Ala	Ser	Glu	Lys	Asp	Ala
	130				135						140				
Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
145					150					155				160	
Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
				165				170						175	
Asn	Thr	Glu	Gly	Val	Ala	Leu	Ala	Ser	Tyr	Gly	Met	Glu	Asp	Glu	Gly

180 185 190
 Trp Phe Asp Pro Trp Cys Leu Leu Gln Gly Leu Arg Arg Lys Val Gln
 195 200 205
 Ser Leu Gly Val Leu Phe Cys Gln Gly Glu Val Thr Arg Phe Val Ser
 210 215 220
 Ser Ser Gln Arg Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys
 225 230 235 240
 Arg Ile His Glu Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln
 245 250 255
 Pro Val Glu Cys Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala
 260 265 270
 Gln Ile Ala Ala Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu
 275 280 285
 Gln Gly Thr Lys Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val
 290 295 300
 Trp His Cys Pro Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp
 305 310 315 320
 Thr Ser Gly Ala Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu
 325 330 335
 Gly Gly Arg Ser Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu
 340 345 350
 Glu Val Asp His Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala
 355 360 365
 Leu Arg Val Pro Ala Phe Glu Thr Leu Lys Cys Phe Val His Pro Gln
 370 375 380
 Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp Tyr Asn Thr Phe Asp Gln
 385 390 395 400
 Asn Gly Val Val Gly Pro His Pro Leu Val Val Asn Met Tyr Phe Ala
 405 410 415
 Thr Gly Phe Ser Gly His Gly Leu Gln Gln Ala Pro Gly Ile Gly Arg
 420 425 430
 Ala Val Ala Glu Met Val Leu Lys Gly Arg Phe Gln Thr Ile Asp Leu
 435 440 445
 Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu Gly Glu Lys Ile Gln Glu
 450 455 460
 Asn Asn Ile Ile
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<210> 3839

<211> 758

<212> DNA

<213> Homo sapiens

<400> 3839

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 120

gtccttttca cttatttcca gggagacatt gggtcagtag tggatgaaca cttctcaaga
 180

gctttgggcc aagccatcac cctccatcca gaatctgcc tttcaaaaag caagatgggg
 240

ctaaccccc tatggcgaga cagctcagct ctctcaagcc agcggaatag tttcccaact
 300

tccttttggga ccagctcttta ccagcccccga cctgcacctt gtttgggggg agttcctcct
 360
 gacttcagg tcaactggacc ccctggcacc ttttctgcag ctgatccag tccttggcgcg
 420
 ggacacaacc tgcacagac tggcccagcc cctccccctg ctgtgtctga gtcttggcct
 480
 tatcctttga catctcaggt gagcccatcc tacagccata tgcacgacgt gtacatgcgg
 540
 caccaccacc ctcatgcccga catgcaccac cgccaccgcc accatcatca ccatcaccac
 600
 cctctgtctg gctctgccct ggatccatcc tatgggcctc tgctgatgcc ttcagtgcac
 660
 gcggccagga ttctgtctcc ccagtgtgac atcacaaaga cagaaccaac tacagtcacc
 720
 tctgtacct cagcatgggc tggagccttt catggaac
 758

<210> 3840

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3840

Xaa	Arg	Val	Gln	Asp	Ser	Leu	Glu	Val	Thr	Leu	Pro	Ser	Lys	Gln	Glu
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Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Asp	Gln	Pro	Ala	Glu
			20					25					30		
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
		35					40					45			
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln
	50					55					60				
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
65					70					75				80	
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
				85					90					95	
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
			100					105					110		
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
		115					120					125			
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
	130					135					140				
His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro
145					150					155				160	
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
				165					170				175		
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
			180					185				190			
Arg	His	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp
		195					200					205			
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
		210				215					220				
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
225					230					235				240	
Ser	Ala	Thr	Ser	Ala	Trp	Ala	Gly	Ala	Phe	His	Gly				

245

250

<210> 3841

<211> 367

<212> DNA

<213> Homo sapiens

<400> 3841

ctgggaactc cccacacttc cgtgggcaac atcttggggg cattgatcgc tggctactgg
60
gtgtccacat gctggggcct gtcttctgct gtgcctggag ccatcgtggc agccatgggg
120
atagtgtgct ttctcttctt cattgaacat ccgaacgacg tcaggtgctc ctccaccctg
180
gtgacgcact caaaaggcta tgagaatggg acaaacaggt tgagcctccc gaagccaatc
240
ttgaagagcg aaaagaacaa gcctctggac ccagagatgc agtgctgct gctctcagat
300
gggaagggtt ccatccaccc gaaccacgct gtcattctcc ccggggacgg tgggagtggc
360
ccggccg
367

<210> 3842

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3842

Leu	Gly	Thr	Pro	His	Thr	Ser	Val	Gly	Asn	Ile	Leu	Gly	Ser	Leu	Ile
1				5					10					15	
Ala	Gly	Tyr	Trp	Val	Ser	Thr	Cys	Trp	Gly	Leu	Ser	Phe	Val	Val	Pro
			20					25				30			
Gly	Ala	Ile	Val	Ala	Ala	Met	Gly	Ile	Val	Cys	Phe	Leu	Phe	Leu	Ile
	35					40				45					
Glu	His	Pro	Asn	Asp	Val	Arg	Cys	Ser	Ser	Thr	Leu	Val	Thr	His	Ser
	50				55					60					
Lys	Gly	Tyr	Glu	Asn	Gly	Thr	Asn	Arg	Leu	Ser	Leu	Pro	Lys	Pro	Ile
65				70				75						80	
Leu	Lys	Ser	Glu	Lys	Asn	Lys	Pro	Leu	Asp	Pro	Glu	Met	Gln	Cys	Leu
			85					90					95		
Leu	Leu	Ser	Asp	Gly	Lys	Gly	Ser	Ile	His	Pro	Asn	His	Val	Val	Ile
			100				105						110		
Leu	Pro	Gly	Asp	Gly	Gly	Ser	Gly	Pro	Ala						
			115				120								

<210> 3843

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3843

ngctgtccgg cccgcagggc ggtcgaggtg ggaacggagc agccccgggg gcccccttga
60

ggcgggcgagg ccgcgaaggg cgcggggctg gaggcccgcg gcgccatggc tcacgtcggc
 120
 tcccgcgaagc gctcgaggag tcgcagccgg tcccggggac gggggtcgga aaagagaaag
 180
 aagaagagca ggaaagacac ctcgaggaac tgctcggcct ccacatccca aggtcgcaag
 240
 gccagcacgg cccctggggc ggaggcctca ccttctccct gcacacaga gagaagcaag
 300
 cagaaggccc ggaggagaac aagatccagc tctcctcct cttcttccag ttcttctagc
 360
 tcctcttctt cctcctcgtc ctctcctct tctccagtg atggccggaa gaagcggggg
 420
 aagtacaagg acaagaggag gaagaagaag aagaagagga agaagctgaa gaagaagggc
 480
 aaggagaagg cggaagcaca gcaggcagag catcatccgc aaggtggtgg accctgagac
 540
 ggggcgacc aggttatta agggagatgg cgaggctcta gaggaaatcg taaccaaga
 600
 acgacacaga gagatcaaca agcaagccac ccgaggggac tgcttggcct tccagatgag
 660
 agctgggttg ctctctgagg gccccgctgg caaggctgtg gacgacgtg gc
 712

<210> 3844

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3844

Met	Ala	His	Val	Gly	Ser	Arg	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser
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Arg	Gly	Arg	Gly	Ser	Glu	Lys	Arg	Lys	Lys	Ser	Arg	Lys	Asp	Thr	
			20					25				30			
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
		35					40					45			
Ala	Pro	Gly	Ala	Glu	Ala	Ser	Pro	Ser	Pro	Cys	Ile	Thr	Glu	Arg	Ser
	50					55				60					
Lys	Gln	Lys	Ala	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65				70				75					80		
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			85					90					95		
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
		100						105				110			
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
		115				120						125			
Ala	Glu	Ala	Gln	Gln	Ala	Glu	His	His	Pro	Gln	Gly	Gly	Gly	Pro	
	130					135						140			

<210> 3845

<211> 2302

<212> DNA

<213> Homo sapiens

<400> 3845

naecgctggt tctgctgggc cttggttttg gctacttgga tccgctgggc cccacagacc
60
agccccgcag tacctgctgt gccccggctc aagcggggtg gagaacacgg agctcgtcaa
120
gtcaccagct gagtacctga tgatgctgat gccaccagc caggaggagg agaaagacaa
180
gcctgtggcc cccagcaacg tcctgtcgat ggcccagctg cgcacgctgc ccctggccga
240
tcagatcaag atcctgatga agaattgtaa ggtcatgcct ttgccaact tgatgagcct
300
cctgggcccc tccatcgatt ccgtggctgt tctgcggggc atccagaagg tggcgatggt
360
ggtccaaggg aactgggtgg tgaagagtga catcctatac cccaaggact cgtccagccc
420
tcacagcggc gtgctgctg aggtgctctg caggggccga gacttcgtta tgtggaagtt
480
cacgcagagc cgctgggtgg ttaggaaaga ggtggcaacc gtgaccaaac tctgcgccga
540
ggatgtgaag gacttcctgg agcacatggc cgtggtgagg atcaacaaag gctgggagtt
600
cattctgcct tatgatgggg agttcatcaa gaagcaccgc gatgtggtcc agcggcagca
660
catgctgtgg acgggtatcc aggccaaact ggaaaaagtc tataatcttg taaaggaaac
720
catgccaaag aagccgatg cacaatcagg gcctgccggg ctggtctgtg gggaccagcg
780
gatccaagta gccaaaacca aggccagca gaaccacgcg ttgctggagc gggagctgca
840
gcggcggaag gagcagctgc gggtgctgc ggtcccgccc ggtgtgcgga tcaaggagga
900
gcccgtgagc gaggagggcg aggaggacga ggagcaggag gcggaggagg agcccatgga
960
cacttcccc agcggcctcc acagcaagct ggccaacggg ctgcctctcg ggcgggctgc
1020
gggcacagac agcttcaacg ggcacccgcc ccagggtgc gccagcacc ctgtggctcg
1080
ggaactgaag gccttcgtg aggccacct tcagagacag ttgtgtctca cgctgagcga
1140
actcaagcgc ctcttcaatc tgcacttggc cagcctgccc cccggccaca cactcttcag
1200
cggcatctcg gaccgcatgc tacaggacac ggtgctggcc gccggttgca agcagatact
1260
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1320
ggagtctgga gacatgagtg atcagcatcg acaggttttg cttgaaattt ttccaaaaa
1380
ttaccgggta cggcgaacaa tgatccagtc tcggttgact caagagtgtg gagaagatct
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1500
gtaccttaaa gggacagtac agtcttgaca atagtagcaa actactaacc cagcaaatct
1560
aagcccaagg aagaaggcg gaaccagaag tagggcctcg acttgcttca gacgacacag
1620

agcaagagga actgaccatc tcattgacctg tggcattgca cgggtgcagtg gacagaaggg
 1680
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 1740
 agctggggacc ttctttgcag tacaatttga aattcctgat gtattttgct tattatttgg
 1800
 tttcattctc ataataaaga gagtgtatac ttacatgggc aggatgataa aaatcatggt
 1860
 ttaatatattt cttttgtaaa cttaatgcc acaagggtcta agttatgttt acaacatgaa
 1920
 gaaaacctca aagttcttaa tttttaaaat gcctagaaga caatatttag tcttggatta
 1980
 tctatctgct aagacctcca ccaatttcat taaaccaa tgaattattc tattcttggg
 2040
 attctgtggc cacttcacct ttgacaacaa cctactttat gtagcagtct caactgttta
 2100
 catgaacat agcaaaaaa tcagaatcaa atccatctcc ttttaatgtt tgcagaaaga
 2160
 tgcaaacaaa accaggtaag tatggaacaa tgtgtaagt aggttatcac actttgatgt
 2220
 aaaaatttct attttgtgta tttttaaaat aaatgcaaac actaaactaa aaaaaaaaaa
 2280
 aaaaaaaaaa aaaaaaaaaa aa
 2302

<210> 3846

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3846

Ser	Cys	Lys	Gly	Asn	His	Ala	Lys	Glu	Ala	Gly	Cys	Thr	Ile	Arg	Ala
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Cys	Arg	Ala	Gly	Leu	Trp	Gly	Pro	Ala	Asp	Pro	Ser	Ser	Gln	Asn	Gln
			20					25					30		
Gly	Pro	Ala	Glu	Pro	Arg	Val	Ala	Gly	Ala	Gly	Ala	Ala	Ala	Ala	Glu
		35					40				45				
Gly	Ala	Ala	Ala	Gly	Ala	Cys	Gly	Pro	Ala	Arg	Cys	Ala	Asp	Gln	Gly
	50				55					60					
Gly	Ala	Arg	Glu	Arg	Gly	Gly	Arg	Gly	Gly	Arg	Gly	Ala	Gly	Gly	Gly
65				70				75						80	
Gly	Gly	Ala	His	Gly	His	Phe	Pro	Gln	Arg	Pro	Pro	Gln	Gln	Ala	Gly
			85					90					95		
Gln	Arg	Ala	Ala	Ser	Arg	Ala	Gly	Cys	Gly	His	Arg	Gln	Leu	Gln	Arg
		100						105					110		
Ala	Pro	Ala	Pro	Gly	Leu	Arg	Gln	His	Pro	Cys	Gly	Ser	Gly	Thr	Glu
	115						120					125			
Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu
	130				135					140					
Arg	Thr	Gln	Ala	Pro	Leu	Gln	Ser	Ala	Leu	Gly	Gln	Pro	Ala	Pro	Arg
145				150					155					160	
Pro	His	Thr	Leu	Gln	Arg	His	Leu	Gly	Pro	His	Ala	Thr	Gly	His	Gly
			165				170						175		
Ala	Gly	Arg	Arg	Leu	Gln	Ala	Asp	Thr	Gly	Ala	Phe	Ser	Pro	Pro	Asp